GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: December 14, 2004, 16:09:49; Search time 4 Seconds (without alignments)
4.004 Million cell updates/sec

US-10-679-532-78 3230

Title: Perfect score: Sequence: 1 ATCCTAATCAAGACCCCAGT......AAAACTTCTCTCAAGGATCC 3230

Scoring table: IDENTITY_NUC Gapext 0.5

Searched: 112 seqs, 2479 residues

Total number of hits satisfying chosen parameters:

224

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 88 summaries

Database :

rnpbdb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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equence 71,	equence 70,	equence 69,	quence 68,	equence 67,	equence 66,	equence 6	quence 64.	equence 63.	emience 62	מונים מני,	equence 50,	quence 58	equence 5',	equence 50,	quence 55,	equence 54,	equence 53,	equence 52,	equence 51,	equence 50,	equence 49,	equence 48,	equence 47,	equence 46,	equence 45,	equence 44,	equence 43,	equence 42,	equence 41,	equence 40,	equence 39,	equence 71,	equence 70,	equence 69,	quence 68,	equence 67.	eduence ey,	quence 64,	equence 63,	e 62,	equence 61,	equence 60,	quence 5	equence 58,	equence 57,	quence 56,	equence 5	equence 54,	equence 5	equence 52,	Sequence 51. Ap	OTHER ED A
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ALIGNMENTS

RESULT 1

US-09-993-346-214

Sequence 214, Application US/09993346

Sequence 214, Application US/09993346

Publication No. US20030124530A1

GENERAL INFORMATION:
Cantor, Charles R.
Applicant: Edwards, Cynthia A.
Andrews, Beth M.
Turin, Lisa M.
Fry, Kirk B.
TITLE OF INVENTION: Sequence-Directed DNA Binding
Molecules, Compositions and Methods

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Sequence 2005, Application US/10131827
Publication No. US20040009479A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Wohlgemuth, Jay
APPLICANT: Fry, Kirk
APPLICANT: Woodward, Robert
APPLICANT: Ly, Ngoc
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING AUTOIMMUNE
TITLE OF INVENTION: CHRONIC INFLAMMATORY DISEASES
FILE REFERENCE: 506612000120
CURRENT APPLICATION NUMBER: US/10/131,827
CURRENT APPLICATION NUMBER: US/10/131,827
CURRENT FILING DATE: 2002-09-06
PRIOR APPLICATEN NUMBER: US 10/006,290
PRIOR FILING DATE: 2001-10-22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 13-NO. US20030124530A1-2001
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/354,947
FILING DATE: «Unknown»
APPLICATION NUMBER: US 08/171,389
FILING DATE: 20-DEC-1993
APPLICATION NUMBER: US 08/123,936
FILING DATE: 17-SEP-1993
APPLICATION NUMBER: US 07/996,783
APPLICATION NUMBER: US 07/996,783
FILING DATE: 23-DEC-1992
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ADDRESSEE: Genelabs Technologies, Inc.
STREET: 505 Penobscot Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Brady, John F.
REGISTRATION NUMBER: 39,118
REFERENCE/DOCKET NUMBER: 4600-0175.20/G19P3D1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 07/723,618
FILING DATE: 27-JUN-1991
APPLICATION NUMBER: US 08/081,070
FILING DATE: 22-JUN-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PETENTIN Release #1.0,
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT
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TYPE: nucleic acid
STRANDEDNESS: double
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100.0%; Pred. No. 2.7;
tive 0; Mismatches
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GENERAL INFORMATION:

APPLICANT: Yang, Shumin

APPLICANT: WcCall, Catherine A.

APPLICANT: Weber, Eric R.

APPLICANT: Weber, Eric R.

APPLICANT: Weber, Eric R.

ITITLE OF INVENTION: CANINE AND FELINE IMMUNOREGI

TITLE OF INVENTION: ACID MOLECULES, AND USES THI

FILE REFERENCE: IM-2-C1-C1

CURRENT APPLICATION NUMBER: US/09/755,633

CURRENT APPLICATION NUMBER: 09/322,409

PRIOR FILING DATE: 1999-05-28

PRIOR FILING DATE: 1998-05-29

NUMBER OF SEG ID NOS: 21

SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/131,827
CURRENT FILING DATE: 2002-09-06
PRIOR APPLICATION NUMBER: US 10/006,290
PRIOR FILING DATE: 2001-10-22
PRIOR APPLICATION NUMBER: US 60/296,764
PRIOR FILING DATE: 2001-06-08
NUMBER OF SEQ ID NOS: 9090
SOFTWARE: PACENTIN VERSION 3.1
SEQ ID NO 3711
LENGTH: 50
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                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/09755633 Patent No. US20020127200A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3711, Application US/10131827 Publication No. US20040009479A1
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LENGTH: 50
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Fry, Kirk
APPLICANT: Woodward, Robert
APPLICANT: Ly, Ngoc
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING AUTOIMMUNE
TITLE OF INVENTION: CHRONIC INFLAMMATORY DISEASES
FILE REFERENCE: 506612000120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Wohlgemuth, Jay
APPLICANT: Fry, Kirk
APPLICANT: Woodward, Rober
APPLICANT: Ly, Ngoc
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PRIOR FILING DATE: 2001-06-08
NUMBER OF SEQ ID NOS: 9990
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
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Similarity 100.0%; Pred. No.
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                                                                                                                                                                                                                        CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
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Sequence 135, Application US/10262439

Publication No. US20030143196A1

GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Sim, Gek-Kee
APPLICANT: Vang, Shumin
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR APPLICATION NUMBER: 09/322,409
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SEQ ID NO 135
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C1
CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR APPLICATION NUMBER: 05/087,306
PRIOR PILING DATE: 1998-05-29
RUMBER OF SEQ ID NOS: 154

RUMBER OF SEQ ID NOS: 154
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Pred. No. 7.5;
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Pred. No. 7
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APPLICANT: Yang, Shumin
APPLICANT: McCell, Catherine A.
APPLICANT: McCell, Catherine A.
APPLICANT: McCell, Catherine A.
APPLICANT: McCell, Catherine A.
TITLE OF INVENTION: CANINE AND FELLIR IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-Cl-Cl
CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/99/755,633
PRIOR FILING DATE: 109-05-28
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR PILING DATE: 1998-05-29
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
COCTUMENT: DECELL US/10/21
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SEQ ID NO 135
LENGTH: 42
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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US-10-787-382-2/c
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US-10-450-905-5
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PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ/ID NOS: 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Ver. 2.1
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                                                                                                                                                                                                                                             OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                         TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                       FEATURE:
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                                                                                                                                                                         Local Similarity
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No. US20040191868A1
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95.2%;
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Pred. No. 7
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Pred. No. 7
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Sequence 5, Application US/10450905
Publication No. US20040058360A1
GENERAL INFORMATION:
APPLICANT: NAKAZATO Hiroshi

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TITLE OF INVENTION: METHOD FOR CONCENTRATION OF GENE FILE REFERENCE: 2003-0245/WMC/01736 CURRENT APPLICATION INVESTE: US/10/450,905 CURRENT FILING DATE: 2003-06-19

PRIOR APPLICATION NUMBER: JP 2000-386025

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Sequence 82, Application US/09789529
Patent No. US20020132290A1
GENERAL INFORMATION:
APPLICANT: Frazer, Kelly A.
APPLICANT: Rubin, Edward M.
APPLICANT: Loots, Gabriela G.
APPLICANT: Loots, Gabriela G.
APPLICANT: The Regents of the University of California
TITLE OF INVENTION: Coordinate Cytokine Regulatory Sequences
FILE REFERENCE: 014939-001300US
CURRENT APPLICATION NUMBER: US/09/789,529
CURRENT APPLICATION NUMBER: US/09/789,529
CURRENT APPLICATION NUMBER: US/09-24
PRIOR APPLICATION NUMBER: US 60/183,657
PRIOR PILING DATE: 2000-02-18
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; OTHER INFORMATION: hIL-5 - reverse
US-09-789-529-82
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SOFTWARE: PATENTIN VET. 2.1
SEQ ID NO 82
LENGTH: 29
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NUMBER OF SEQ ID NOS: 10
SEQ ID NO 5
                                                                                                                                                                                                                                                                                       Sequence 24, Application US/09887145 Publication No. US20030082139A1
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Best Local Similarity 100.0%;
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                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Kim, Seung U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence FEATURE:
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les 29; Conserv
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb storage
COMPUTER: Dell PC
                                                                                                                                                                                  NUMBER OF SEQUENCES: 54
                                                                                                                                                                                                                                                                                                                                                                                                                              1950 GTACTGTGGAAAGACTATTCAAAAAACTTG 1978
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                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: David Prashker,
                                                                                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                        29 GTACTGTGGAAAGACTATTCAAAAACTTG 1
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                                                                                             STATE: Massachusetts
                                                                                                              CITY: Magnolia
                                                                                                                                      STREET: P.O.
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                                                                                                                                  Box 5387
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Pred. No. 23;
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RESULT 12
US-09-755-633-3/c
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US-10-450-905-6
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Best Local Sim
Matches 28;
            Sequence 3, Application US/09755633

Patent No. US20020127200A1

GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: WcCall, Catherine A.
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1-C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 6, Application US/10450905
publication No. US20040058360A1
GENERAL INFORMATION:
APPLICANT: NAKAZATO Hiroshi
TITLE OF INVENTION: METHOD FOR CONCENTRATION OF
FILE REFERENCE: 2003-0245/WMC/01736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 10
SEQ ID NO 6
LENGTH: 27
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Best Local S
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CURRENT FILING DATE: 2003-66-19
PRIOR APPLICATION NUMBER: JP 2000-386025
PRIOR FILING DATE: 2000-12-19
CURRENT APPLICATION NUMBER: US/09/755,633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: (978) 525
INFORMATION FOR SEQ ID NO: 24:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: David Prashker, Esq.
REGISTRATION NUMBER: 29,693
REFERENCE/DOCKET NUMBER: UB
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: MS DOS
SOFTWARE: Microsoft Word version 97
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                    1981 CTTAATAAAGAAATACATTGACGGCCA 2007
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                           27 CTTAATAAAGAAATACATTGACGGCCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28 CTTGTCCTTAATAAAGAAATACATTGAC 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/887,145
FILING DATE: 22-Jun-2001
CLASSIFICATION: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 28 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.9%; Score 28; DB ilarity 100.0%; Pred. No. 28 Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                       100.0%;
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100.0%; Pred. No.
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                                                                                                                                                          RESULT 14
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SEQ ID NO 3
                                                                                                        Sequence 136, Application US/10262439 Publication No. US20030143196A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 136, Application US/10218654
Publication No. US20030099609A1
                                                                                    GENERAL INFORMATION:
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Best Local Similarity
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                         -10-218-654-136
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PRIOR APPLICATION NUMBER: US/09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR FILING DATE: 1998-05-29
RRIOR FILING DATE: 1998-05-29
NUMBER OF SEC TO SEC
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PRIOR APPLICATION NUMBER: 60/6
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 21
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS,
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT FILING DATE: 200
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1999-
                    APPLICANT:
                                                                     APPLICANT: Sim, Gek-Kee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/218,654
CURRENT FILING DATE: 2002-08-13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 154
                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
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                                                                                                                                                                                                             -- 27 TGAGAATGAGGSCCAASMAAGRGTCAG 1
                                                                                                                                                                                                                                              2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
CANT: Yang, Shumin
CANT: Dreitz, Matthew J.
CANT: Wonderling, Ramani S.
OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
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Pred. No. 38;
4; Mismatches
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Pred. No. 38;
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FILE REFERENCE: IM-2-C2
FILE REFERENCE: IM-2-C2
CURRENT APPLICATION NUMBER: US/10/262,439
CURRENT FILING DATE: 2002-09-30
PRIOR APPLICATION NUMBER: US/09/451,527
PRIOR FILING DATE: 1999-12-01
PRIOR APPLICATION NUMBER: 09/22,409
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 60/087,306
PRIOR APPLICATION NUMBER: 50/087,306
PRIOR FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
NUMBER OF SEQ ID NOS: 174
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US-10-787-382-3/c
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                                                                                                                                                        US-10-787-382-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Yang, Shumin
APPLICANT: McCall, Catherine A.
APPLICANT: McCall, Catherine A.
APPLICANT: Weber, Eric R.
APPLICANT: Weber, Eric R.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 136
LENGTH: 27
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                           SEQ ID NO 3
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                                                                         Matches
                                                                                                              Query Match
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Publication No. US20040191868A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/787,382
CURRENT FILING DATE: 2004-02-24
PRIOR APPLICATION NUMBER: US/09/755,633
PRIOR FILING DATE: 2001-01-05
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR APPLICATION NUMBER: 09/322,409
PRIOR FILING DATE: 1999-05-28
PRIOR ETLING DATE: 1999-05-28
PRIOR BEPLICATION NUMBER: 60/087,306
                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: IM-2-C1-C1
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                                                                                                                                                                          OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                                               FEATURE:
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                                                                         Local Similarity
mes 23; Conserv
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                                    2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
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TGAGAATGAGGSCCAASMAAGRGTCAG 1
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                                                                            Conservative
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                                                                                            0.8%;
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                                                                                              Score 25.4;
Pred. No. 38
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Pred. No. 3
                                                                            Mismatches
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RESULT 16 US-09-887-145-23

Sequence 23, Application US/09887145 Publication No. US20030082139A1

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RESULT 17
US-10-393-602-14
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Publication No. US20030170714A1
GENERAL INFORMATION:
APPLICANT: Gregory Dolganov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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Best Local S
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APPLICANT: Kim, Seuritle of INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION
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MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb
COMPUTER: Dell PC
OPERATING SYSTEM: MS DOS
SOFTWARE: Microsoft Word version 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/887,145
FILING DATE: 22-Unn-2001
CLASSIFICATION UNKNOWN
ATTORNEY/AGENT INFORMATION:
NAME: David Prashker, Esq.
REGISTRATION UNMBER: 29,693
REFERENCE/DOCKET NUMBER: UBC-002
TELEPHONE: (978) 525-3794
UFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 25 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 100.0%;
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/393,602
EILING DATE: 19-Mar-2003
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/592,126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 23:
                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Dehlinger & Associates
STREET: 350 Cambridge Avenue, Suite 250
                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: David Prashker, Esq.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cell and continuous cell line NUMBER OF SEQUENCES: 54
                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               555 GAGGATGCTTCTGCATTTGAGTTTG 579
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25,
                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                           COUNTRY: USA
ZIP: 94306
                                                                                                                                                                                                                                                                   STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Magnolia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: P.O. Box 5387
                                                                                                                                                                                                                                                                                 CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Seung
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                                                                                                                                                                                                                                                                                                                                                                                      Polypeptides
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                                                                                                                                                                                                                                                                                                                                                                                                       Transcripts Encoding Immunomodulatory
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Sequence 10. Application US/10632534A

Publication No. US20040058373A1

GENERAL INFORMATION:
APPLICANT: WINKLER, MATTHEW M.
APPLICANT: BROWN, DAVID

TITLE OF INVENTION: COMPETITIVE AMPLIFICATION OF FRACTIONATED TARGETS FROM
TITLE OF INVENTION MULTIPLE NUCLEIC ACID SAMPLES

FILE REFERENCE: AMBI:065US
CURRENT APPLICATION NUMBER: US/10/632,534A

CURRENT FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: PCT/US02/03169
PRIOR APPLICATION NUMBER: 60/265,692
PRIOR APPLICATION NUMBER: 60/265,692
PRIOR FILING DATE: 2001-01-31

PRIOR APPLICATION NUMBER: 50/265,692
PRIOR FILING DATE: 2001-01-31

NUMBER OF SEQ ID NOS: 24
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US-10-632-534A-10/c
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                                                                                                                                                       US-10-632-534A-10
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Best Local Similarity 100.
Matches 24; Conservative
                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 10
LENGTH: 23
TYPE: DNA
                                                                            Matches
                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (415) 324-0880
TELEPAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                         OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: Primer
                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                  ORGANISM: Artificial Sequence
                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 24 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Primer
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION: ATTORNEY/AGENT INFORMATION: NAME: Sholtz, Charles K. REGISTRATION NUMBER: 38,615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1883 CACCAACTGTGCACTGAAGAAATC 1906
                                      2249 GGAGGAGAAGGACATTTTACTGC 2271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ANTI-SENSE: NO
23 GGAGGAGAAGGACATTTTACTGC 1
                                                                                              Similarity
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                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.7%; Score 23;
100.0%; Pred. No.
                                                                              Mismatches
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                                                                                                               Length 23;
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                                                                              Indels
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RESULT 19 US-10-393-602-15/c

Sequence 15, Application US/10393602
Publication No. US20030170714A1
GENERAL INFORMATION:
APPLICANT: Gregory Dolganov

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SOFTWARE: Pa
SEQ ID NO 9
LENGTH: 21
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Best Local Similarity
Matches 21; Conserv
                                                                                                                                                                                                                                                                                                                   Sequence 9, Application US/10632534A Publication No. US20040058373A1 GENERAL INFORMATION:
                                                                                                                       APPLICANT: WINKLER, MATTHEW M.
APPLICANT: BROWN, DAVID
TITLE OF INVENTION: COMPETITIVE AMPLIFICATION OF FRACTIONATED TARGETS FROM
TITLE OF INVENTION: MULTIPLE NUCLEIC ACID SAMPLES
FILE REFERENCE: AMBI:065US
CURRENT APPLICATION NUMBER: US/10/632,534A
CURRENT FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: PCT/US02/03169
PRIOR FILING DATE: 2002-01-31
                                                           PRIOR APPLICATION NUMBER: 60/265,692
PRIOR FILING DATE: 2001-01-31
NUMBER OF SEQ ID NOS: 24
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Primer IL4-2
SEQUENCE DESCRIPTION: SEQ ID NO: 15:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/592,126
FILING DATE: 26-VAN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600-011:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Dehlinger & Associates
STREET: 350 Cambridge Avenue, Suite 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDENNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (415) 324-0880
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Transcripts Encoding Immunomodulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2181 GGTGTAATGAACACCGAGTGG 2201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                         PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTGTAATGAACACCGAGTGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/10/393,602 FILING DATE: 19-Mar-2003 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: CA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 21; DB 1; ; Pred. No. 52;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4600-0111
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TITLE OF INVENTION: COMPETITIVE AMPLIPICATION OF FRACTIONATED TARGETS FROM
TITLE OF INVENTION: MULTIPLE NUCLEIC ACID SAMPLES
FILE REFERENCE: AMBI:065US
CURRENT APPLICATION NUMBER: US/10/632,534A
CURRENT FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: POT/US02/03169
PRIOR FILING DATE: 2002-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
NUMBER: OF SEQ ID NOS: 24
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 23
LENGTH: 21
TYPE: DNA
ORGANISM: Artificial Sequence
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US-10-632-534A-23
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                                                                                                                                                                                                                                                                                                                                                                           RESULT 22
US-09-758-881-152/c
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                                                                                                                             TITLE OF INVENTION: Antisense Oligonucleot:
TITLE OF INVENTION: Expression
FILE REFERENCE: ISPH-0532
CURRENT APPLICATION NUMBER: US/09/758,881
CURRENT FILING DATE: 2001-01-11
PRIOR APPLICATION NUMBER: PCT/US00/09054
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 09/288,461
PRIOR APPLICATION NUMBER: 09/288,461
PRIOR FILING DATE: 1999-04-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.
Matches 21; Conservative
                                                       SEQ ID NO 152
LENGTH; 20
                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION: APPLICANT: Karras,
                                                                                                                                                                                                                                                                                                                                          Sequence 152, Application US/09758881 Patent No. US20010029250A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 23, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: WINKLER, MATT APPLICANT: BROWN, DAVID
                                                                                          NUMBER OF SEQ ID NOS:
SOFTWARE: PatentIn V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                672 TCGAACTCTGCTGATAGCCAA 692
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                                                                                                                                                                                                                                                                                                      Karras, James G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                              Ver.
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                                                                                                                                                                                                                                                                                     Antisense Oligonucleotide Modulation of STAT3
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    Mismatches

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. 52;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 39 LENGTH: 20
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                                                       SEQ ID NO 40
                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 40, Application US/09800629A Patent No. US20020128216A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                           CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G
                                                                                                                                                                                                                                                          APPLICANT: MANONARAN, MUTHIAH
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                  APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
                                                                              SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                                          FILE REFERENCE: ISPH-0537
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ORGANISM: Artificial Sequence
                                       LENGTH: 20
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mes 20; Conserv
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Pred. No.
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Pred. No.
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; FEATURE: ; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-800-629A-40
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US-09-800-629A-42/c
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PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 42
LENGTH: 20
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Best Local Similarity
Matches 20; Conserv
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Best Local Similarity
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Patent No. US20020128216A1
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                                                                                                                                 APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKAY, Robert
APPLICANT: MCKAY, Robert
APPLICANT: MCKAY, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR PILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G APPLICANT: MCKBY, Robert APPLICANT: McKBY, Robert
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ORGANISM: Artificial Sequence
FEATURE:
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100.0%; Pred. No
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RESULT 27
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US-09-800-629A-42
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Best Local Similarity
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LENGTH: 20
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NUMBER OF SEQ ID NOS: 210
SOFTWARE: PatentIn Ver. 2
SEQ ID NO 44
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                                                                                                                                   APPLICANT: McKay, Robert
APPLICANT: Mancharan, Muthiah
APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
FILE REFERENCE: ISPH-0537
                                                   CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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NUMBER OF SEQ ID NOS: 210
SOFTWARE: PatentIn Ver. 2.0
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILB REFERENCE: ISPH-0537
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APPLICANT: Karra
APPLICANT: MCKay
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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Karras, James G
McKay, Robert
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00.0%; Pred. No.
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Pred. No.
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
ITITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
ITITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
ITITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT FPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: DCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
COPPMANDE: DATE: 199-03-26
NUMBER OF SEQ ID NOS: 210
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US-09-800-629A-46/c
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SEQ ID NO 45
LENGTH: 20
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Best Local Similarity
Matches 20; Conserv
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                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Dean, Nicholas
                                                                                                                                                                                                                                                                                                                                          Sequence 46, Application US/09800629A Patent No. US20020128216A1
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Best Local Similarity
SEQ ID NO 46
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CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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APPLICANT: MGROPATAN, MULTHAIN
TITLE OF INVENTION: ANTIGENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Dean,
APPLICANT: Karra
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ORGANISM: Artificial Sequence
PEATURE;A:
OTHER INFORMATION: Description of Artificial Sequence:Synthetic
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, OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-800-629A-46
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US-09-800-629A-48/c
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PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 47
                                                                                                                                                                                                                                                                                    Sequence 48, Application US/09800629A Patent No. US20020128216A1
GENERAL INFORMATION:
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Best Local (
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Best Local S
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                                                                                                                                                APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
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                                                  PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
                                                                                                           CURRENT APPLICATION NUMBER: US/09/800,629A CURRENT FILING DATE: 2001-03-07
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APPLICANT: MANDARAN, MULDIAH
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
              PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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PatentIn
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McKay, Robert
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; Pred. No. 57;
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; Pred. No. 57;
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APPLICANT: KATTAB, James G

APPLICANT: MCKBY, Robert

APPLICANT: MANCHARAN, MUTHIBH

APPLICANT: MANCHARAN, MUTHIBH

TITLE OF INVENTION: TRANSDUCTION

FILE REFERENCE: ISPH-0537

CURRENT FILING DATE: 2001-03-07

PRIOR APPLICATION NUMBER: US/09/800,629A

CURRENT FILING DATE: 2000-03-17

PRIOR APPLICATION NUMBER: PCT/US00/07318

PRIOR FILING DATE: 2000-03-17

PRIOR FILING DATE: 1909-03-26

NUMBER OF SEQ ID NOS: 210
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Best Local Sim
Matches 20;
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LENGTH: 20
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LENGTH: 20
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APPLICANT: Karras, James G
APPLICANT: MCKay, Robert
APPLICANT: MCKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
                                                                                                                                                                                                           APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G APPLICANT: McKay, Robert
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NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
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ORGANISM: Artificial Sequence
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US-09-800-629A-52/c
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Best Local Similarity
Matches 20; Conserv
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Best Local Similarity
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LENGTH: 20
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                                                                                                                                                                                                                                                                  Sequence 52, Application US/09800629A Patent No. US20020128216A1
                                                       APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: 1SPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
CURRENT FILING DATE: 2001-03-07
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISH-0537
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    PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR ADDITORNO DATE: 2000-03-17
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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APPLICATION NUMBER: 09/280,799
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5. US20020128216A1
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McKay, Robert
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100.0%; Pred. No. 57;
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100.0%; Pred. No.
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 53
LENGTH: 200
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
FEATURE:
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Best Local Similarity
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APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF I
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
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Best Local Similarity 100.0%;
Matches 20; Conservative (
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SEQ ID NO 52
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                                                                                                                                                   APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G APPLICANT: McKay, Robert APPLICANT: Manoharan, Muthi
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
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APPLICANT: Karra
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PRIOR APPLICATION NUMBER: PCT/US00/07318
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE: OTHER INFORMATION: Description of Artificial Sequence:Synthetic
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                                                                                                                                                                             Sequence 56, Application US/0
Patent No. US20020128216A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
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NUMBER OF SEQ ID NOS: 210
SOFTWARE: PATENTIN VEY: 2.0
SEQ ID NO 54
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Best Local Similarity
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APPLICANT: KATTAS, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: McKay, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
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CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                 RESULT 42
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US-09-800-629A-57
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LENGTH: 20
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 57
LENGTH: 20
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Best Local Similarity
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Patent No. US20020128216A1
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Best Local Similarity
                                                     APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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PRIOR FILTNG DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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100.0%; Pred. No.
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57;
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
FRIOR APPLICATION NUMBER: PCT/US00/07318
FRIOR FILING DATE: 2000-03-17
FRIOR APPLICATION NUMBER: 09/280,799
FRIOR FILING DATE: 1999-03-26
INUMBER OF SEQ ID NOS: 210
SOPTWARE: Patentin Ver. 2.0
SEQ ID NO 59
LENGTH: 20
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GENERAL INFORMATION:
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Best Local Similarity
Matches 20; Conserv
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Best Local Similarity
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
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100.0%; Pred. No.
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100.0%; Pred. No. 57;
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Sequence 62, Application US/09800629A
PAtent NO. US/0020128216A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James
APPLICANT: McKay, Robert
APPLICANT: MCKay, Robert
APPLICANT: MCKAY, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF I
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEO ID NOS: 210
SOPTWARE: Patentin Ver. 2.0
SEQ ID NO 61
ENOTH: 20
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US-09-800-629A-61/c
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Best Local S
Matches 20
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SEQ ID NO 60
LENGTH: 20
TYPE: DNA
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Best Local Similarity
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APPLICANT: Karras, James
APPLICANT: McKay, Robert
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTIERNSE MODULATION OF
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
CURRENT FILING DATE: 2001-03-07
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ORGANISM: Artificial Sequence
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: McKay, Robert
Manoharan
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                                                                 OF INTERLEUKIN-5 SIGNAL
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US-09-800-629A-63
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GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karzas, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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Best Local Similarity
Matches 20; Conserv
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                                                                                                                                                                     Sequence 64, Application US/09800629A Patent No. US20020128216A1
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Best Local :
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SEQ ID NO 63
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CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEC IN NOS: 230-26
NUMBER OF SEC IN NOS: 230-26
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
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ORGANISM: Artificial Sequence
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Pred. No.
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Pred. No.
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APPLICANT: McKay, Robert
APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 2000-03-26
NUMBER OF SEQ ID NOS: 210
SECTIMARE: Patentin Ver. 2.0
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US-09-800-629A-65/c
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Patent No. US20020128216A1
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 64
LENGTH: 20
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Best Local Similarity
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
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TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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100.0%; Pred. No. 57;
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RESULT 51
US-09-800-629A-67/c
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Sequence 68, Application US/09800629A
Patent No. US20020128216A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: Mocharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 210
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 67
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SEQ ID NO 66
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Best Local Similarity
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Patent No. US20020128216A1
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CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G APPLICANT: McKay, Robert
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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CURRENT FILING DATE: 2001-03-07
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TYPE: DNA
ORGANISM: Artificial Sequence
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Pred. No.
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57;
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SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 68
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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US-09-800-629A-69/c
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                                                                                                                                                       RESULT 54
                                                                 Sequence 70, Application US/09800629A Patent No. US20020128216A1
GENERAL INFORMATION:
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LENGTH: 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REPERENCE: ISPH-0537
CURRENT APPLICATION UNMER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION UNMER: PCT/US00/07318
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARER: DEFARITE NOS: 210
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Best Local Similarity
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CURRENT'.APPLICATION NUMBER: US/09/800,629A
CURRENT'ELING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Dean, Nicholas M
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
                  APPLICANT: Dean, Nicholas
APPLICANT: Karras, James
APPLICANT: McKay, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 100.0%;
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Karras, James G
McKay, Robert
Mancharra
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100.0%; Pred. No.
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00.0%; Pred. No.
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APPLICANT:

Manoharan, Muthiah

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                                                                                                            US-10-679-532-39/c
                                                                                                                                 RESULT 56
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US-09-800-629A-71
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                                                      Sequence 39, Application US/10679532 Publication No. US20040121376A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                               Matches
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Best Local Similarity
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SEQ ID NO 71
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Best Local
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Patent No. US20020128216A1
APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G APPLICANT: McKay, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/800,629A
CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
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CURRENT FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
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PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G. APPLICANT: McKay, Robert
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PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Artificial Sequence
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Pred. No.
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PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILLING DATE: 2001-03-07
PRIOR FILLING DATE: 2000-03-17
PRIOR FILLING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILLING DATE: 199-03-26
PRIOR FILLING DATE: 199-03-26
PRIOR FILLING DATE: 210
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 40
ENGTH: 20
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US-10-679-532-40/c
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Best Local Sim
Matches 20;
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SEQ ID NO 39
LENGTH: 20
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Publication No. US20040121376A1
                                                                          Matches
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APPLICANT: McKay, Robert
APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
FILE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
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PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
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                                                                                                                                                  FEATURE: OTHER INFORMATION: Description of Artificial
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                                                                                                                                                                                                                            TYPE: DNA
                                 523 CCAAAGGCAAACGCAGAACG 542
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100.0%; Pred. No.
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0; Mismatches
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57;
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57;
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RESULT 58 US-10-679-532-41/c ~~~mence 41, Application US/10679532

Publication No. US20040121376A1

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; FEATURE: ; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-10-679-532-41
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                                                                                                                                                      US-10-679-532-42
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CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR PPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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SEQ ID NO 41
LENGTH: 20
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SEQ.ID NO 42
                                                                           Matches
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Publication No.
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: MANONARAN, MUTHIAH
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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ORGANISM: Artificial Sequence
                                                                                                                                                                    OTHER INFORMATION: Description of Artificial Sequence: Synthetic
                                                                                                                                                                                                       ORGANISM: Artificial Sequence
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                       688 GCCAATGAGGTAATTTTCTT 707
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McKay, Robert
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No. US20040121376A1
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as, James G
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100.0%; Pred. No.
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Pred. No.
                                                                           Mismatches
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57;
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US-10-679-532-43/c
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US-10-679-532-44/c
                                                                  US-10-679-532-44
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Publication No. US20040121376A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
                                                                                                                                                                                                 SOFTWARE: PatentIn Ver. SEQ ID NO 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 43
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Best Local Similarity 100.0%;
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                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: MANONARAN, MUTHIAN
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G. APPLICANT: McKay, Robert
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
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APPLICANT: McKay, Robert
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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TYPE: DNA
                                                                                       OTHER INFORMATION: Description of Artificial Sequence: Synthetic
                                                                                                              FEATURE:
                                                                                                                                 TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                               LENGTH: 20
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Score 20; Pred. No.
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                                                           SEQ ID NO 46
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Publication No.
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Best Local S
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SEQ ID NO 45
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CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
                                                                                                                                    PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Dean, APPLICANT: Karre
                                                                                                                                                                                                                                                                                              APPLICANT: MCKay, Robert
APPLICANT: Manohazan, Muthiah
TITLE OF INVENTION: ANTIGENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 09/280,799 PRIOR FILING DATE: 1999-03-26
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
                                                                                                                      PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                FILE REFERENCE:
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ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
ORGANISM: Artificial Sequence
                      TYPE: DNA
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Karras, James G
McKay, Robert
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               CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILLING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILLING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILLING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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Publication No. US20040121376A1
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LENGTH: 20
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APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: PatentIn Ver. 2.0
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CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
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TITLE OF INVENTION: ANTISENSE MODULATION OF
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                                                                                                            APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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ORGANISM: Artificial Sequence
FEATURE:
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PatentIn
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McKay, Robert
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PRIOR APPLICATION NUMBER: US/10/679,532

PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: 90/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SEQ ID NO 49
LENGTH - ~
              ; Sequence 50, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
    APPLICANT: Dean, Nicholas M.
    APPLICANT: Mancharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILS REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT APPLICATION NUMBER: US/10/679,532
; PRIOR APPLICATION DATE: 2001-03-07
; PRIOR APPLICATION DATE: 2001-03-07
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; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-48
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US-10-679-532-49/c
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Publication No. US20040121376A1
GENERAL INFORMATION:
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Best Local Similarity
Matches 20; Conser
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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ORGANISM: Artificial Sequence
RIOR APPLICATION NUMBER: PCT/US00/07318
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100.0%; Pred. No.
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100.0%; Pred. No. 57
tive 0; Mismatches
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57;
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RESULT 68
US-10-679-532-51/c
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US-10-679-532-52/c
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CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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SEQ ID NO 50
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                          Sequence 52, Application US/10679532 Publication No. US20040121376A1 GENERAL INFORMATION:
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SEQ ID NO 51
LENGTH: 20
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Publication No. US20040121376A1
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Best Local Similarity 100
Matches 20; Conservative
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Best Local Similarity
APPLICANT: MCKAY, ROBERT APPLICANT: MANOHARAN, MULHIAH APPLICANT: MANOHARAN, MULHIAH TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION FILE REFERENCE: ISPH-0537
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PRIOR APPLICATION NUMBER: 09/-
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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McKay, Robert
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McKay, Robert
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L00.0%; Pred. No. 57;
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57;
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PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 52
RESULT 71
US-10-679-532-54/c
US-10-679-532-54/c
; Sequence 54, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
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US-10-679-532-53
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US-10-679-532-52
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Best Local Similarity 100.0%; P
Matches 20; Conservative 0;
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Best Local Similarity
Matches 20; Conserv
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SEQ ID NO 53
LENGTH: 20
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PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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APPLICANT: McChay, Robert
TITLE OF INVENTION: TRANSDUCTION
TITLE OF INVENTION: TRANSDUCTION
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CURRENT FILING DATE: 2003-10-06
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CURRENT FILING DATE: 2003-10-06
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ORGANISM: Artificial Sequence
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No. US20040121376A1
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Pred. No. 57;
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PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR FILING DATE: 2001-03-17
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver: 2.0
SEQ ID NO 55
LENGTH: 20
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US-10-679-532-55/c
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SEQ ID NO 54
LENGTH: 20
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Best Local Similarity
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Best Local
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 203-10-06
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PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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CURRENT FILING DATE: 2003-10-06
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                 ORGANISM: Artificial Sequence FEATURE: OTHER INFORMATION: Description of Artificial Sequence:Synthetic
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                                 2002 CGGCCAAAAGTAAGTTACA 2021
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                                                                                           0.6%; Score 20;
100.0%; Pred. No:
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100.0%; Pred. No.
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                                                                          Mismatches
                                                                                             DB 1;
57;
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RESULT 73 US-10-679-532-56/c

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SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 57
LENGTH: 20
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SEQ ID NO 56
LENGTH: 20
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                                                                                    Query Match
Best Local Similarity
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CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US/09/800,629A PRIOR FILING DATE: 2001-03-07 PRIOR FILING TOWN NUMBER: PCT/US00/07318 PRIOR FILING DATE: 2000-03-17
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CURRENT APPLICATION NUMBER: US/10/679,532

CURRENT FILING DATE: 2003-10-06

CURRENT FILING DATE: 2003-10-06
                                                                                                                                                   OTHER INFORMATION: Description of Artificial Sequence:Synthetic 10-679-532-57
                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G APPLICANT: McKay, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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                                                                                                                                                                                          TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Description of Artificial Sequence: Synthetic
2108 TTTTTCACAGAAAAAGTGTG 2127
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McKay, Robert
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                                                                   Conservative
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                                                                                    100.0%;
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                                                                                    0.6%; Score 20; DB 1; Length 20; L00.0%; Pred. No. 57;
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100.0%; Pred. No.
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; OTHER INFORMATION: Description of US-10-679-532-59
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Best Local Similarity
Matches 20; Conserv?
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKAy, Robert
                                                                                                              PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 59
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 58
LENGTH: 20
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APPLICANT: Dean, Nicholas
APPLICANT: Karras, James
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TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/9/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR FILING DATE: 2000-03-17
PRIOR PILING DATE: 2000-03-17
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
                                                                                                                                                                                                                                                                               TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION FILE REFERENCE: ISPH-0537 CURRENT APPLICATION NUMBER: US/10/679,532 CURRENT FILING DATE: 2003-10-06 PRIOR APPLICATION NUMBER: US/09/800,629A PRIOR FILING DATE: 2001-03-07 PRIOR APPLICATION NUMBER: US/09/800,629A PRIOR FILING DATE: 2001-03-07 PRIOR APPLICATION NUMBER: PCT/US00/07318
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                             TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
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McKay, Robert
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; Pred. No.
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                      Artificial Sequence:Synthetic
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57;
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Query Match

Score 20;

DB 1;

Best Local Similarity

100.0%;

Pred. No.

57;

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US-10-679-532-60
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CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
                                                                                                  CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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Best Local
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                                                         SOFTWARE: P
                                                                                                                                                                                                                                                                                                                   APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 210
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G
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ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
                                          ENGTH: 20
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McKay, Robert
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Vo. US20040121376A1
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Pred. No.
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RESULT 80
US-10-679-532-63/c
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; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Pac
SOFTWARE: Pac
SEQ ID NO 62
FENGTH: 20
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: 05/280,799
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
PRIOR FILING DATE: 1999-03-26
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Best Local Similarity
Matches 20; Conserv
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                                                                                                                                                                                                                                                                                                                                             Sequence 63, Application US/10679532 Publication No. US20040121376A1
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Best Local Similarity
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APPLICANT: McKay, Robert
APPLICANT: Manchare
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PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
                                                                                                                                                                      APPLICANT: McKay, Robert
APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                                                         APPLICANT: Dean, Nicholae M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRICE APPLICATION NUMBER: US/09/800,629A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Dean, Nicholas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
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No. US20040121376A1
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Pred. No.
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Sequence 65, Application US/10679532
Publication No. US20040121376A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: Karras, James G
APPLICANT: MCRAy, Robert
APPLICANT: Manoharan, Muthiah
APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTITLE REPERENCE: ISPH-0537
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Best Local Similarity
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Best Local Similarity
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Publication No. US20040121376A1
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NUMBER OF SEQ ID NOS: 210
SOFTWARE: PatentIn Ver. 2.0
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CURRENT FILING DATE: 2003-10-06
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TITLE OF INVENTION: ANTISENSE MODULATION OF
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver.
              CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
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FILING DATE: 2001-03-07
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McKay, Robert
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100.0%; Pred. No. 57;
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57;
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; Sequence 67, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: MCKAY, Robert
; APPLICANT: MGKAY, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF
; TITLE OF INVENTION: TRANSDUCTION
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US-10-679-532-67/c
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US-10-679-532-66/c
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CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT FILING DATE: 2003-10-06
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
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SEQ ID NO 65
LENGTH: 20
TYPE: DNA
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SEQ ID NO 66
LENGTH: 20
TYPE: DNA
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PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Karras, James APPLICANT: McKay, Robert
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                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Description of Artificial Sequence: Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence FEATURE:
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100.0%; Pred. No.
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                         OF INTERLEUKIN-5 SIGNAL
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RESULT 86
US-10-679-532-69/c
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US-10-679-532-68
                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: ISPH-0537

CURRENT APPLICATION NUMBER: US/10/679,532

CURRENT FILING DATE: 2003-10-06

PRIOR APPLICATION NUMBER: US/09/800,629A

PRIOR FILING DATE: 2001-03-07

PRIOR APPLICATION NUMBER: PCT/US00/07318

PRIOR FILING DATE: 2000-03-17

PRIOR APPLICATION NUMBER: 09/280,799

PRIOR FILING DATE: 1999-03-26
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Sequence 69, Application US/10679532
Publication No. US20040121376A1
GENERAL INFORMATION:
                                                                                                                                                                                                                     Query Match
Best Local (
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SEQ ID NO 68
LENGTH: 20
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Best Local Similarity
                                                                                                                                                                                                      Matches
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APPLICANT: Karra
APPLICANT: McKay
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: PT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Manoharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-679-532-68/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                                                                                                           ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE: OTHER INFORMATION: Description of Artificial Sequence:Synthetic
                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
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Karras, James G
McKay, Robert
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100.0%; Pred. No.
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CURRENT APPLICATION NUMBER: US/10/679,532

CURRENT FILING DATE: 2003-10-06

PRIOR APPLICATION NUMBER: US/09/800,629A

PRIOR FILING DATE: 2001-03-07

PRIOR APPLICATION NUMBER: PCT/US00/07318

PRIOR PFILING DATE: 2000-03-17

PRIOR APPLICATION NUMBER: 09/280,799

PRIOR FILING DATE: 1999-03-26

NUMBER OF SEQ ID NOS: 210

SOFTWARE: Patentin Ver: 2.0

SEQ ID NO 69

LENGTH: 20

TYPE: DUA

ORGANISM: Artificial Sequence

PEATURE:

OTHER INFORMATION: Description of Artificial Sequence:Synthetic

US-10-679-532-69
                                                                                                                                                                                                                                                                                                                    APPLICANT: Mancharan, Muthiah
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT APPLICATION NUMBER: US/09/800,629A
PRIOR APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR FILING DATE: 2001-03-07
PRIOR FILING DATE: 2001-03-17
PRIOR PRILING DATE: 2001-03-17
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: Patentin Ver. 2.0
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                                                                                                                                                                                                                                                                               SEQ ID NO 70
LENGTH: 20
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Best Local Similarity
Matches 20; Conserv
                                                                                      Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G
APPLICANT: McKay, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: KERYA, James G
APPLICANT: McKay, Robert
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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                           2002 CGGCCAAAAAGTAAGTTACA 2021
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No. US20040121376A1
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100.0%; Pred. No. 57
lve 0; Mismatches
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Nicholas M.

Page 25

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Sequence 71 Application US/10679532
Publication No. US20040121376A1
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Marcharan, Muthiah
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0537
CURRENT APPLICATION NUMBER: US/10/679,532
CURRENT APPLICATION NUMBER: US/09/800,629A
PRIOR FILING DATE: 2001-03-07
PRIOR APPLICATION NUMBER: US/09/800,7318
PRIOR APPLICATION NUMBER: PCT/US00/07318
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR APPLICATION NUMBER: 09/280,799
PRIOR PILING DATE: 1009-03-26
NUMBER OF SEQ ID NOS: 210
SOFTWARE: PatentIn Ver: 2.0
ORGANISM: Artificial Sequence
PEATURE:
PEATURE:
PATURE: DNA
ORGANISM: Artificial Sequence
PEATURE:
POTHER INFORMATION: Description of Artificial Sequence:Synthetic
Search completed: December 14, 2004, 16:09:53
Job time : 4 secs
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US-08-486-852-2
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US-09-280-799-40
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US-09-280-799-50
US-09-280-799-50
US-09-280-799-51
US-09-280-799-60
US-09-
                   IS-09-198-452A-5483

IS-09-07-039-1

IS-09-322-409-134

IS-09-451-527-134

IS-09-451-527-136

IS-09-198-452A-5765

IS-09-198-452A-5765

IS-08-434-503-53

IS-09-331-347C-5
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sequence

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ALIGNMENTS

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US-08-171-389-214
                                                                                                                                        ; INDIVIDUAL ISOLATE: Human interleukin 5 (IL-5) gene US-08-171-389-214
                                                                                                                                                                                                                                                                   TELEFAX: (415) 324-0880
INFORMATION FOR SEQ ID NO: 214:
SEQUENCE CHARACTERISTICS:
LENGTH: 50 base note:
                                                                       Matches
                                                                                    Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 33,875
REFERENCE/DOCKET NUMBER: 460
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                             ORIGINAL SOURCE
                                                                                                                                                                                             MOLECULE TYPE: DE HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 22-JUN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Fabian, Gary R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 27-JUN-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/081,070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/996,783
FILING DATE: 23-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/723,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Fry, Kirk B.
TITLE OF INVENTION: Sequence-Directed DNA Binding
TITLE OF INVENTION: Molecules, Compositions and Methods
NUMBER OF SEQUENCES: 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 435
                                                                                                                                                                                                                                           TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Redwood City
STATE: CA
                                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 08/123,936 FILING DATE: 17-SEP-1993
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                                 459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
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1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT
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                                                                                    Similarity
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                                                                      Conservative
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Andrews, Beth M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Edwards,
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                                                                                  1.5%; Score 50; DB 1; 100.0%; Pred. No. 2.8;
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50
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                                                                    Gaps
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RESULT 2 US-08-123-936-214

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FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/996,783
FILING DATE: 23-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/723,518
FILING DATE: 27-JUN-1991
APPLICATION INFORMATION:
NAME: Fablan, Gary R.
REGISTRATION NUMBER: 33,875
REGISTRATION NUMBER: 33,875
REGISTRATION NUMBER: 4600-007;
TELECOMMUNICATION:
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                                                                                                                                                                                                                                       RESULT 3
US-08-475-228A-214
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                                                              GENERAL INFORMATION:
APPLICANT: Edwards
APPLICANT: Cantery
APPLICANT: Turin,
APPLICANT: Fry, Ki
                                                                                                                                                                                            Sequence 214, Application US/08475228A Patent No. 5869241
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (415) 324-0960 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HYPOTHETICAL: N
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/123,936
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               APPLICANT: Fry, Kirk E. TITLE OF INVENTION: Seq
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ADDRESSEE: Genelabs Technologies, Inc
STREET: 505 Penobscot Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Screening Assay for the Detection TITLE OF INVENTION: DNA-Binding Molecules
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
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ZIP: 94063
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                                                                                                                                                                                                                                                                                                                                                          459 CATTTCCTCAAAGACAACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
    ဝှု
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                                                                                                                                                                                                                                                                                                                           CATTTCCTCANAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50
    SEQUENCES:
                                                                                                                              Cantor, Charles R.
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                                                                             Turin,
                                                                                                   Andrews, Beth M.
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Turin, Lisa M.
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                                                                                  Lisa M.
Sequence-Directed DNA Binding Molecules, Compositions and Methods 664
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                                                                                                                                                                                                        GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 50 base pairs
                                                                                                                                                   APPLICANT:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
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PRIOR APPLICATION NUMBER: US 08/123,936
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                              APPLICANT: Fry, Kirk E.
TITLE OF INVENTION: Sequence-Directed DNA Binding
TITLE OF INVENTION: Molecules, Compositions and Methods
NUMBER OF SEQUENCES: 664
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COMPUTER READABLE FORM:
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                                                 CORRESPONDENCE ADDRESS:
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   STREET:
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CITY: Redwood City
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TOPOLOGY: lir
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                                 ADDRESSEE:
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DEDNESS: double
SEE: Genelabs Technologies, Inc
: 505 Penobscot Drive
Redwood City
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                                                                                                                               Edwards, Cynthia A. Cantor, Charles R. Andrews, Beth M. Turin, Lisa M.
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505 Penobscot Drive
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                    Patent No. 6384208
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FILING DATE: 23-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/723,618
FILING DATE: 27-JUN-1991
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
US 08/081,070
FILING DATE: 22-JUN-1993
ATTORNEY/AGENT INFORMATION:
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APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
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REGISTRATION NUMBER: 39,118
REFERENCE/DOCKET NUMBER: 46/
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 324-0880
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APPLICATION NUMBER: US/08/482,080A
FILING DATE: 07-UN-1995
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
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                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Genelabs
                                                                                                                                           APPLICANT: Fry, Kirk E.
TITLE OF INVENTION: Sequence-Directed DNA Binding
TITLE OF INVENTION: Molecules, Compositions and M
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PRIOR APPLICATION DATA:
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FILING DATE: 20-DEC-193
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/123,936
                                                                                                                             NUMBER OF SEQUENCES:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
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                                   STATE:
                                                       CITY:
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                   COUNTRY:
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                                                     Redwood City
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                                                                       E: Genelabs Technologies,
505 Penobscot Drive
                                                                                                                                                                                                       Cantor, Charles R.
Andrews, Beth M.
Turin, Lisa M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.5%; Score 50; DB 1; Length 50; ilarity 100.0%; Pred. No. 2.8; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                 Cynthia A.
                                                                                                                                 664
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Best Local S
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HYPOTHETICAL: NO
ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: 1
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TELEFAX: (650) 324-0960
INFORMATION FOR SEQ ID NO: 214
SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
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FILING DATE:
PRIOR APPLICATION DATA:
PRIOR TCATION NUMBER: US 08/482,080
^^-JUN-1995
^^/171,389
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APPLICATION NUMBER: US 08/123,936
FILING DATE: 17-SEP-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                    TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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FILING DATE: 23-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/723,618
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TELECOMMUNICATION INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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REGISTRATION NUMBER: 39,118
                                                                                                    COUNTRY: U
                                                                                                                                                          CITY: Redwood City
                                                                                                                                                                                                  ADDRESSEE:
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STRANDEDNESS: double
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        50 base pairs
                                                                                                                                                                            505 Penobscot Drive
                                                                                                                      USA
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                                                                                                                                                                                            Genelabs Technologies, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                      Sequence-Directed DNA Binding Molecules, Compositions and Methods
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human interleukin 5 (IL-5) gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4600-0175.20/G19P3D1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 50; DB 1; Length 50; Pred. No. 2.8;
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US-08-466-852-2/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/08466852 Patent No. 5681936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 50 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION: APPLICANT:
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 47 bases
                                                                                                                                                                                                                          ZIP: 07065-0907

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 in, 1.4kb
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.0.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Human interleukin 5 (IL-5) gene
                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: PANZEY, CUTCIE C.
REGISTRATION NUMBER: 33,752
REFERENCE/DOCKET NUMBER: 19151IA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 4600-0175.41/G19PCT2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 17-SEP-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 23-DEC-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
US 08/123,936
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APPLICATION NUMBER: PC
FILING DATE:
CLASSIFICATION:
                                                                  TELEPHONE: (908)594-3199
                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                            STREET: TANKAY
                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Fabian, Gary R. REGISTRATION NUMBER:
                                                     TELEFAX:
                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 0 FILING DATE: 17-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  50;
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                                                                                                                                                                                                                                                                                                                                                                                                           126 East Lincoln Avenue
                                                   (908)594-4720
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                                                                                                                                                                                                                                                                                                                                                                        Jersey
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100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A SINGLE STEP PURIFICATION OF RECOMBINANT HUMAN INTERLEUKIN-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US 07/996,783
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RESULT 8
US-08-466-852-3
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                                                             US-09-322-409-135/c
; Sequence 135, Application US/09322409
; Patent No. 6471957
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US-08-466-852-2
                                                                                                         RESULT 9
                                                                                                                                                         밁
GENERAL INFORMATION:
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sequence 3, Application US/08466852
Patent No. 5681936
                                                                                                                                                                                                                  Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (908)594-4720
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: PARZEY, CUTTIS C.
REGISTRATION NUMBER: 33,752
REFERENCE/DOCKET NUMBER: 19
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.0.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Rahway
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                                                                                                                                                                       586 CTTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCA 628
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                                                                                                                                                                                                                  43;
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                                                                                                                                                      CTTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCA 43
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                                                                                                                                                                                                                                                                                                                                                43 bases
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                                                                                                                                                                                                                                                                                         DNA (genomic)
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                                                                                                                                                                                                                              1.3%; Score 43;
100.0%; Pred. No.
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Pred. No. 4.
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                                                                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                           Length 43,
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GENERAL INFORMATION:

APPLICANT: Sim, Gek-Kee

APPLICANT: Yang, Shumin

APPLICANT: Yang, Shumin

APPLICANT: Wonderling, Ramani S.

ITILE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PRO

ITILE OF INVENTION: ACID MOLECULES, AND USES THEREOF

FILE REFERENCE: IM-2-C2

CURRENT APPLICATION NUMBER: US/09/451,527

CURRENT FILING DATE: 1999-12-01

EARLIER APPLICATION NUMBER: 09/322,409

EARLIER APPLICATION STREET

EARLIER FILING DATE: 1999-05-28
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SEQ ID NO 135
                                                                                                                                                                                                                        SEQ ID NO 135
LENGTH: 42
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 135, Application US/09451527
Patent No. 6482403
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local :
                                                                         Matches
                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF, INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IN-2-C1
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
CURRENT FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                 EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 174
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                           EARLIER APPLICATION NUMBER: 60/087,306
                                                                                                                                                                  OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                      FEATURE:
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                                 2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
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                                                                     40;
42
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                                                                         Conservative
                                                                                                                                                                    Description of Artificial Sequence: Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.3%;
                                                                                         1.3%;
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Pred. No. 7.6;
2; Mismatches
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                                                                                         Score 41.2;
Pred. No. 7
                                                                           Mismatches
                                                                                                             DB
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                                                                                                             Length 42
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                                                                                                                                                                                        Synthetic
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RESULT 11 US-08-434-503-48

Patent No.

5616490

GENERAL INFORMATION:
APPLICANT: Sean M
APPLICANT: Kennet

Sean M. Sullivan Kenneth G. Draper Sequence 48, Application US/08434503

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                                                                                                                                                                                                                                                                                                                                        Sequence 4, Applic Patent No. 5681936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-DAN-1993
APPLICATION NUMBER: 07/989,849
PILICATION NUMBER: 07/989,849
           ZIP: 07065-0907

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 in, 1
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.0.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                     atent No. 5681936
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                               TITLE OF INVENTION: A TITLE OF INVENTION: RE NUMBER OF SEQUENCES: 4 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 611 West S:
CITY: Los Angeles
STATE: California
COUNTRY: USA
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                                                                                                                                        COUNTRY:
                                                                                                                                                                               CITY: Rahway
                                                                                                                                                                                            STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
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                                                                                                                                                                                                                ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2136 AGACGGAGAGTAAACCAATTCCTAGACTACCTGC 2169
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E OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleic acid
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                                                                                                                                                          New Jersey
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                                                                                                                                                                                              E: Merck & Co., Inc.
126 East Lincoln Avenue
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611 West Sixth Street
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                                                                                                                                                                                                                                                                 A SINGLE STEP PURIFICATION OF RECOMBINANT HUMAN INTERLEUKIN-5
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US/08/466,852
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                                                                                     3.5 in, 1.4kb
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                                                         US-08-466-852-1
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  Matches
             Query Match
Best Local
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                       TELEFAX: (908)594-472
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ
                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 07065-0907
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 in, 1.4kb
                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 39 bases
                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: PARZET, CUTLIS C.
REGISTRATION NUMBER: 33,752
REFERENCE/DOCKET NUMBER: 19:
                                                                                                                                                                                                                                                                                                                   COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.0.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
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TITLE OF INVENTION:
TITLE OF INVENTION:
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REFERENCE/DOCKET NUMBER: 19
TELECOMMUNICATION INFORMATION:
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CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Panzer, Curtls C.
                                                                       TOPOLOGY: 1
MOLECULE TYPE:
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                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
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CORRESPONDENCE ADDRESS:
                                                                                TYPE:
STRANDEDNESS: BI
                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 424
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STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                      LENGTH: 39 Date acid
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                Similarity
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126 East Lincoln Avenue
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                                                                                                                                                                       (908) 594-4720
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(908)594-4720
OR SEQ ID NO: 4
  Conservative
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                                                                       DNA (genomic)
                                                                                                  single
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 Score 33.4; DI
Pred. No. 19;
0; Mismatches
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Pred. No. 17;
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US-08-434-503-51
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                                                                                                                                                                 Sequence 10, Application US/08721260 Patent No. 5968755
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Best Local Similarity
Matches 25; Conserv
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WOIGHPETECT (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/8/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION 04-MAY-1995
CLASSIFICATION NUMBER: US 08/008,895
PRIOR APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-193
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
APPLICATION DATE: December 7, 1992
APPLICATION TIPORNATION:
NAME: Warbning Bichard 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent No. 5616490 GENERAL INFORMATION:
                                                                                                                                            GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF INFLAMMATC
NUMBER OF INVENTION: DISEASE
APPLICANT: Roederer, Mario
APPLICANT: Rabin, Ronald
APPLICANT: Herzenberg, Leonore A.
APPLICANT: Herzenberg, Leonard A.
TITLE OF INVENTION: Methods for Determining T-cell Profiles
TITLE OF INVENTION: of Immunocompromised Subjects
NUMBER OF SEQUENCES: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Warburg, Richard J. REGISTRATION NUMBER: 32,3 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
STRANDEDNESS: single
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STATE: California
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STREET: 61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY:
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611 West Sixth Street
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ER: 200/276
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COMPUTER: IBM PC COMPACTIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/721,260
PILING DATE: 26-SEP-1996
CLASSIFICATION: 514
PRIOR APPLICATION NUMBER: US 60/004,364
PRIOR APPLICATION NUMBER: US 60/004,364
FILING DATE: 27-SEP-1995
ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 8600-0161.30
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
INFORMATION FOR SEQ ID NO: 10:
INFORMATION FOR SEQ ID NO: 10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 16
US-08-434-503-53
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                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Sean M. Sullivan
APPLICANT: Kenneth G. Drape;
TITLE OF INVENTION: METHOD ;
TITLE OF INVENTION: TREATMEN
TITLE OF INVENTION: DISEASE
                COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ANTI-SENSE: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: line MOLECULE TYPE: DI HYPOTHETICAL: NO
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                                                                                                                                                                                                                                 ADDRESSEE: Lyon & Ly
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                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
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STRANDEDNESS: S....
STRANDEDNESS: S....
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CITY: 3 Palo Alto
                                                                                                                                                                         CITY: Los Angeles
STATE: California
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TYPE: nucleic acid
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                                                                                                                                    ZIP: 90017
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STREET: 350 Cambridge Avenue, Sui
                                                                                                                                                       COUNTRY:
APPLICATION NUMBER:
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US/08/434,503
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Best Local Similarity
                                                                                     TELEFAX: (703) 836-0166
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 29 nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 3.
COMPUTER: IBM Clone, 8088 Turbo
OPERATING SYSTEM: MS DOS 5.0
SOFTWARE: Word Perfect, Version 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Richard A. Steinberg
REGISTRATION NUMBER: 26,588
REFERENCE/DOCKET NUMBER: BOG-139/CIP II
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 549-2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Immunodeficient Mouse Models of
TITLE OF INVENTION: Pathogenesis of Human Disease and Efficacy and Toxicity of
TITLE OF INVENTION: Disease Treatments
NUMBER OF SEQUENCES: 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: December 7, ATTORNEY/AGENT INFORMATION:
MOLECULE TYPE: cDNA HYPOTHETICAL: no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: PCT/US94/10957 FILING DATE: CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 08/008, FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
                                    STRANDEDNESS:
TOPOLOGY: lir
                                                                     TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: U
ZIP: 22314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Goldstein, Harris; Kollmann, Tobias R.
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                                      linear
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                                                      single
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                                                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: Windows95
SOPTWARE: FastSEQ for Windows Version 2.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/859 ^^^
FILING DATE: 21-MAY
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Best Local Similarity
Matches 29; Conserv
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                                                          Matches
                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                    TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 28 base pairs
                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E.
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 0905
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-322-5070
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NAME/KEY:
                                                                                                                             FEATURE:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Chenchik, Alex APPLICANT: Jokhadze, Geor APPLICANT: Bibilashvilli,
                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
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CITY: Menlo Park
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                                                                                                                                                                                       STRANDEDNESS: single
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                                                                                                                                                                                                     TYPE: nucleic acid
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                             1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
                                                          28;
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28 GGGAATAGGCACACTGGAGAGTCAAACT 1
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2200 Sand Hill Road, Suite 100
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Jokhadze, Georg
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                                                          Conservative
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                                                                         100.0%;
                                                                                                                                oligonucleotide primer
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100.0%; Pred. No.
                                                                       0.9%; Score 28; DB 1;
100.0%; Pred. No. 28;
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                                                          Mismatches
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RESULT 19 US-09-225-928-56/c

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
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GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 56:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION IDATA:
APPLICATION NUMBER: US/09/225,928
APPLICATION NUMBER: US/09/225,928
APPLICATION NUMBER: US/09/225,928
FILING DATE: 05-Jan-1999
CLASSIFICATION: <UNKnown>
PRIOR APPLICATION NUMBER: 08/859,998
APPLICATION NUMBER: 08/859,998
FILING DATE: 21-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAWE: Field, Bret E.
NAWE: Field, Bret E.
REGISTRATION NUMBER: 37,620
REGISTRATION NUMBER: 37,620
REGISTRATION NUMBER: 30096/002001
TELECOMMUNICATION:
TELEPHONE: 415-322-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                  ARPLICANT: Chenchik, Alex
Jokhadze, George
Bibilashvilli, Robert
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MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jokhadze, George
Bibilashvilli, Robert
TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Chenchik, Alex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: DNA FEATURE:
                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish &
                                                                                                                                           TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                     1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                 28 GGGAATAGGCACACTGGAGAGTCAAACT 1
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TYPE: nucleic acid
STRANDEDNESS: single
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                                                            STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION:
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                     STATE: CA
                                    CITY: Menlo Park
COUNTRY: US
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                                                        3E: Fish & Richardson, P.C.
2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
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TITLE OF INVENTION: METHODS AND COMPOSITIONS CONCERNING
TITLE OF INVENTION: CANINE INTERLEUKIN 5
FILE REFERENCE: 03604001700US00
CURRENT APPLICATION NUMBER: US/09/371,615A
CURRENT FILING DATE: 1999-08-10
NUMBER OF SEQ ID NOS: 8
SOPTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 5
LENGTH: 28
TYPE: DNA
ORGANISM: Canis familiaris
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US-09-371-615A-5
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                                                                                                                                                      ; OTHER INFORMATION: PCR primer US-09-371-615A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 5, Application US/09371615A Patent No. 6537781
GENERAL INFORMATION:
APPLICANT: IDEXX LABORATORIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                                            Matches
                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 56:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIF: 94025
COMPUTER READABLE FORM:
COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: PastSEQ for Windows Ve
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/859,998
FILING DATE: 21-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret B.
REGISTRATION NUMBER: 37,620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/09/225,201B
FILING DATE: 05-Jan-1999
CLASSIFFICATION: «Unknown»
PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
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                      440 CTGATTGTTAGAAATTATTCATTTCCTC 467
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                                                                            28;
1 CTGATTGTTAGAAATTATTCATTTCCTC 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 28 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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                                                                            Conservative
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                                                                                            0.9%; Score 28; DB 1; 100.0%; Pred. No. 28;
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                                                                                                               Length 28
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                                                                              Gaps
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RESULT 22 US-09-887-145-24/c

Application US/09887145

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                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 41, Apr--
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GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                     Patent No. 5616490
GENERAL INFORMATION:
                                                                                                                                                                                                         TITLE OF INVENTION: METHOD AND RETITLE OF INVENTION: TREATMENT OF TITLE OF INVENTION: DISEASE NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS: ADDRESSEE: Lyon & Lyon & Lyon STREET: 611 West Sixth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION
        COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                          APPLICANT: Sean M. Sullivan
APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
                                                                                                                                                                     CITY: Los Angeles
STATE: California
                                                                                                                                   COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: David Prashker, Esq.
REGISTRATION NUMBER: 29,693
REFERENCE/DOCKET NUMBER: UBC-002
TELECOM/UNICATION INFORMATION:
TELEPHONE: (978) 525-3794
RMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb storage
COMPUTER: Dell PC
OPERATING SYSTEM: MS DOS
SOFTWARE: Microsoft Word version 97
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1975 CTTGTCCTTAATAAAGAAATACATTGAC 2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 24:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/887,145
FILING DATE: 22-Jun-2001
CLASSIFICATION: Unknown
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: David Prashker, Esq.
STREET: P.O. Box 5387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Kim,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28 CTTGTCCTTAATAAAGAAATACATTGAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: Massachusetts
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 01930
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 28 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/08434503
                                                                                                                                                     USA
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US/08/434,503
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US-08-859-998-55
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Chenchik, Alex
APPLICANT: Jokhadze, George
APPLICANT: Bibilashvilli, F
TITLE OF INVENTION: METHOD
TITLE OF INVENTION: EXPRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 55, Appli
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                                                                                 FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E.
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 0909
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-322-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                           TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07
FILING DATE: 19-JAN-15
APPLICATION NUMBER: 07
                                                                                                                                                                                                       OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/859,998
FILING DATE: 21-MAY-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: December 7, 1992 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
ZIP: 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Menlo Park
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
                                                                                                                                                                                                                                                                                                                                                     COMPUTER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200/276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Warburg, Richard J. REGISTRATION NUMBER: 32,3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
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                  ENGTH:
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Similarity 59.3%; Pred. No. 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/08859998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E: Fish & Richardson, P.C.
2200 Sand Hill Road, Suite 100
26 base pairs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jokhadze, George
Bibilashvilli, Robert
                                                                                                                                                                                                                                                                                                                                                   IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                      Diskette
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                METHOD OF ASSAYING DIFFERENTIAL EXPRESSION
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                                                                                                                         09096/002001
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                                                                                                                                  OTHER INFORMATION: oligonucleotide primer; SEQUENCE DESCRIPTION: SEQ ID NO: 55: US-09-225-928-55
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US-09-225-928-55
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Matches
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Patent No. 6352829
GENERAL INFORMATION:
APPLICANT: Chenchik, Alex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                    Matches
                                                                                     Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                  TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 55:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: DNA FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/859,998
PILING DATE: 21-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E.
REGISTRATION NUMBER: 37,620
REFERENCE/DOCKET NUMBER: 09096/002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastUSEO for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL EXPRESSION
                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 1375
                                                                                                                                                                                                              MOLECULE TYPE: DNA
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                                 543 TTTCAGAGCCATGAGGATGCTTCTGC 568
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                                                                                       Similarity
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TTTCAGAGCCATGAGGATGCTTCTGC 26
                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/225,928 FILING DATE: 05-Jan-1999 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: CA
                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: 415-322-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Menlo Park
                                                                                                                                                                                                                                                                                   LENGTH: 26 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/09225928
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                                                                 0.8%; Score 26; DB 1; larity 100.0%; Pred. No. 34; Conservative 0; Mismatches
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Bibilashvilli, R
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                                                                  0,
                                                                                                    Length 26;
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                                                                    Indels
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US-09-225-2018-55

Sequence 55, Application

Patent No. 6489455

GENERAL INFORMATION:
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US-09-322-409-136/c
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                                                                                                                                                                                                                 Sequence 136, Application US/09322409 Patent No. 6471957
                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
APPLICANT: Dreitz, Matthew J.
APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
FILE REFERENCE: IM-2-CI
CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 55:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/225,201B
FILING DATE: 05-Jan-1999
CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US/08/859,998
FILING DATE: 21-MAY-1997
ATTORNEY/AGENT INFORMATION:
NAME: Field, Bret E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: oligonucleotide primer SEQUENCE DESCRIPTION: SEQ ID NO: 55:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: METHOD OF A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Chenchik, Alex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                          543 TTTCAGAGCCATGAGGATGCTTCTGC 568
                                                                                                                                                                                                                                                                                                                                                                                                                                  26;
                                                                                                                                                                                                                                                                                                                                                 1 TTTCAGAGCCATGAGGATGCTTCTGC 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 26 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Field, Bret E. REGISTRATION NUMBER: 37,620
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: 415-322-5070
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Bibilashvilli, R
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CURRENT APPLICATION NUMBER: US/09/451,527
CURRENT FILING DATE: 1999-12-01
EARLIER APPLICATION NUMBER: 09/322,409
EARLIER FILING DATE: 1999-05-28
EARLIER APPLICATION NUMBER: 60/087,306
EARLIER FILING DATE: 1998-05-29
UNMBER OF SEQ ID NOS: 174
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 136
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EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 136
LENGTH: 27
                                                                                                            Sequence 23, Application US/09887145
Patent No. 6780641
GENERAL INFORMATION:
APPLICANT: Kim, Seung U
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Best Local :
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GENERAL INFORMATION:
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Dreītz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Sim, Gek-Kee
APPLICANT: Yang, Shumin
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                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Primer
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                                                                                                                                                                                                                                                                                                                                              Local
CORRESPONDENCE ADDRESS:
ADDRESSEE: David Prashker, Esq.
STREET: P.O. Box 5387
                                                                                                                                                                                                                                                                                        2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
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                                                                                    TITLE OF INVENTION: Immortalized human microglia
                                                        NUMBER OF SEQUENCES:
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Pred. No. 38
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Pred. No. 38
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US-08-592-126-14
; Sequence 14, Application US/08592126
· Patent No. 5821091
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent No. 5821091
GENERAL INFORMATION:
APPLICANT: Gregory D.
TITLE OF INVENTION:
TITLE OF INVENTION:
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                                  ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0860
TELEFAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 14:
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Matches
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Best Local Similarity
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INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 151
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dehlinger & Absociates
                   SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb
COMPUTER: Del1 PC
OPERATING SYSTEM: MS DOS
SOFTWARE: Microsoft Word version 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/887,145
FILING DATE: 22-Jun-2001
CLASSIFICATION: Unknown
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 435
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CITY: Palo Alto
STATE: CA
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LENGTH:
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TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: David Prashker, Esq. REGISTRATION NUMBER: 29,693 REFERENCE/DOCKET NUMBER: UB
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                                                                                                                                                                                                                                                                                                                                                                                                                               350 Cambridge Avenue, Suite 250
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                                                                                                                                                                                                                                                                                                                                                                     USA
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100.0%; Pred. No.
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Best Local Similarity
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Best Local Similarity
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HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                      TELEFAX: (415) 324-096:
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 24 base pairs
                                                                                                                                   ORIGINAL SOURCE:
INDIVIDUAL ISOLATE:
                                                                                                                                                                                          TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                               NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 46
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/592,126
FILING DATE: 26-JAN-1996
ATTORNEY/AGENT INFORMATION:
NAME OF THE PROPERTY OF T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: U$/08/687,080
FILING DATE: 17-JUL-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Gregory Dolganov TITLE OF INVENTION: Human R
                                                                                                                                                                  HYPOTHETICAL:
ANTI-SENSE: NO
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                      TYPE: nucleic acid
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                    1883 CACCAACTGTGCACTGAAGAAATC 1906
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5965427
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CACCAACTGTGCACTGAAGAAATC 24
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(415) 324-0960
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                                                            Conservative
                                                                                                                                                                                                           linear
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                                                                       0.7%; Score 24; DB 1; Length 24; 100.0%; Pred. No. 41;
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RESULT 33
US-08-434-503-47
Sequence 47, Application US/08434503
; Patent No. 5616490
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US-09-168-595-14
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Patent No. 655566
                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 24; Conserv
                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Sean M
APPLICANT: Kennet
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APPLICANT: Gregor
                                               APPLICANT: Kenneth G. Draper TITLE OF INVENTION: METHOD AND TITLE OF INVENTION: TREATMENT (TITLE OF INVENTION: DISEASE NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (415) 324-090
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
ATTORNEY/AGENT INFORMATION:
ANAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                        HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Primer IL5-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 94306
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 24 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/168,595
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/592,126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA RELEASE #11.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Gregory TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
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                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                 1883 CACCAACTGTGCACTGAAGAAATC 1906
                                                                                                                                                                                                                                                                                               1 CACCAACTGTGCACTGAAGAAATC 24
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Los Angeles
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                  E: Lyon & Lyon
611 West Sixth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                       Sean M. Sullivan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 324-0960
                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                   METHOD AND REAGENT FOR TREATMENT OF INFLAMMATORY DISEASE
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100.0%; Pred. No. 41
ive 0; Mismatches
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STATE: California COUNTRY: USA

90017

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APPLICANT: ZHENG, Richard Qihao
TITLE OF INVENTION: INHIBITION OF CYTOKINE PRODUCTION
FILE REFERENCE: N & V 604-57 BTG 137 766
CURRENT APPLICATION NUMBER: US/09/617,548
CURRENT FILING DATE: 2000-07-14
PRIOR APPLICATION NUMBER: GB 9801391.5
PRIOR FILING DATE: 1998-01-22
PRIOR FILING DATE: 1998-01-22
PRIOR APPLICATION NUMBER: GB 9824794.3
PRIOR APPLICATION NUMBER: GB 9824794.3
PRIOR APPLICATION NUMBER: PCT/GB99/00179
PRIOR APPLICATION NUMBER: PCT/GB99/00179
PRIOR APPLICATION NUMBER: PCT/GB99/00179
PRIOR FILING DATE: 1999-01-20
NUMBER: OF SEO ID NOS. 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                             OTHER INFORMATION: Description of Artificial Sequence: Oligomer; OTHER INFORMATION: containing palindromic sequence from human IL-5; OTHER INFORMATION: promoter US-09-617-548-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-434-503-47
Query Match
Best Local Similarity
                                                                                                                                                                                                              SEQ ID NO 13
LENGTH: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
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Best Local
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Patent No. 64762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 04-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/ACENT INFORMATION:
                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                      SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO:
                                                                                                                                              ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Versi
SOFTWARE: WordPerfect (Version 5.1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
TOPOLOGY: lir
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic acid
                                                                                                                                                                                                                                                        PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EAGLES, Peter Ar
ZHENG, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09617548
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  0.7%;
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Pred. No. 45;
  Score 22.4;
Pred. No. 53;
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                     DB 1;
                     Length 27;
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Patent No. 5616490
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                                                                                           Sequence 44, Applice Patent No. 5616490
                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
GENERAL INFORMATION:
APPLICANT: Sean M. Sullivan
APPLICANT: Kenneth G. Draper
APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Sean M
APPLICANT: Kennet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08, FILING DATE: 04-MAY-1995 CLASSIFICATION: 435 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 08, FILING DATE: 19-JAN-1993 APPLICATION NUMBER: 07/98: FILING DATE: December 7, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: Wordberfect (Version 5.1)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200/276
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: TREATMENT OF INFLAMMATORY
TITLE OF INVENTION: DISEASE
NUMBER OF SEQUENCES: 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
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STREET: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: California
                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
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                                                                                                                                                                                                                                              541 CGTTTCAGAGCCATGAGGATGC 562
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                                                                                                            Application US/08434503
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611 West Sixth Street
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                                                                                                                                                                                                                                                                                                                                                                                         single
                                                                                                                                                                                                                                                                                                    0.7%; Score 22; DB 1; 77.3%; Pred. No. 49;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07/989,849
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                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                      Length 22;
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                                                                                                                                                                                                                                                                                     0
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US-08-721-260-9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PILING DATE: 04-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NEORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                tent No.
         COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                               APPLICANT: Herzenberg, Leonore A.
APPLICANT: Herzenberg, Leonard A.
TITLE OF INVENTION: Methods for Determining T-cell Profiles
TITLE OF INVENTION: of Immunocompromised Subjects
NUMBER OF SEQUENCES: 14
CORRESSPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/434,503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Warburg, Richard J. REGISTRATION NUMBER: 32,3 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
                                                                                                                   COUNTRY:
                                                                                                                                                    CITY: Palo Alto
                                                                                                                                                                      STREET:
                                                                                                      ZIP: 94306
                                                                                                                                                                                      ADDRESSEE:
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                                                                                                                                                                      E: Dehlinger & Associates
350 Cambridge Avenue, Suite 250
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611 West Sixth Street
                                                                                                                     USA
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                                                                                                                                                                                                                                                                                                             Rabin,
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BER: 200/276
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Pred. No.
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                Version #1.25
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US-08-592-126-15/c
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Best Local Similarity 100.
Matches 22; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15, Application US/08592126
Patent No. 5821091
GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                     TELEFAX: (415) 324-0960
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                          CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 26-SEP-19
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 27-SEP-19
                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: TR
TITLE OF INVENTION: PO
NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
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REFERENCE/DOCKET NUMBER: 86
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
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                                                                                                                                                                                                                               FILING DATE
                                                                                                                                                                                                                                                                            SOFTWARE:
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TOPOLOGY: linear
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            TYPE: nucleic acid
STRANDEDNESS: single
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                                            LENGTH:
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                                           21 base pairs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gregory Dolganov
                                                                                            (415) 324-0960
                                                                                                                                                                                                                                                                              PatentIn Release #1.0, Version #1.25
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                              Dehlinger & Associates
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%; Pred. No. 49;
0; Mismatches
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                                                                                                                                              4600-0111
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                                                                                                                                                                                                                                                                             FILING DATE: 26-JAN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Sholtz, Charles K.
REGISTRATION NUMBER: 38,615
REFERENCE/DOCKET NUMBER: 4600-0111.30
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
TELEPAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
                                                                        Query Match
Best Local Similarity
                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No.
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Best Local S
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CORRESPONDENCE ADDRESS: ADDRESSE: Dehlinger & Associates ADDRESSEE: Dehlinger & Associates ADDRESSEE: Dehlinger & Associates
                                                                                                                                        ORIGINAL SOURCE: INDIVIDUAL ISOLATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGINAL SOURCE:
                                                                                                                                                                       MOLECULE TYPE: DI
HYPOTHETICAL: NO
ANTI-SENSE: NO
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CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                LENGTH: 21 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/01
FILING DATE: 17-JUL-1996
                                                                                                                                                                                                                     TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Palo Alto
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                   2181 GGTGTAATGAACACCGAGTGG 2201
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                                                            Conservative
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100.0%; Pr
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                                                                         Score 21; DB 1; Pred. No. 53;
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                                                           Mismatches
                                                                                          Length 21;
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                                                           Indels
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RESULT 40

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US-08-621-841-11
                                                                                                                                                                                                                               Sequence 15, Application US/09168595
Patent No. 6555666
GENERAL INFORMATION:
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Patent No. 6096869
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                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (415) 398-324:
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 950
FILING DATE: 22-MAR-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                APPLICANT: Gregory Dolganov
TITLE OF INVENTION: Transcr
TITLE OF INVENTION: Polypep
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Dehlinger & Associates
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                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 21 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Dreger, Walter H
REGISTRATION NUMBER: 2
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CITY: San Francisco
                                                   COUNTRY: UZIP: 94306
                                                                                     STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                     CITY:
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21; Conserv
                                                                                                 Palo Alto
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                                                                                                                    350 Cambridge
                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (415) 398-3249
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Scarpini, Cinzia (
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                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                   Transcripts Encoding Immunomodulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                    0.7%; Score 21;
00.0%; Pred. No.
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PCT-US94-10957-15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15, Application PC/TUS9410957 GENERAL INFORMATION:
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
CLASSIFICATION:
ATTORNEY, AGENT INFORMATION:
NAME: Richard A. Steinberg
REGISTRATION NUMBER: 26,588
REFERENCE/DOCKET NUMBER: BOG-
TELECOMMUNICATION INFORMATION:
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (415) 324-0960
NFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 21 base pairs
                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage COMPUTER: EM Clone, 8088 Turbo
OPERATING SYSTEM: MS DOS 5.0
SOFTWARE: Word Perfect, Version 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/10957
                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
TITLE OF INVENTION:
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INDIVIDUAL ISOLATE: Primer IL4-2
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HYPOTHETICAL: 1
ANTI-SENSE: NO
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APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                               STREET: 413 N. Washington Street CITY: Alexandria
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                                           TELEPHONE:
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                             1: (703) 549-221
(703) 836-0106
                                                                                                                                                                                                                                                                                                                                                                                                                                               Goldstein, Harris; Kollmann, Tobias R.
VENTION: Immunodeficient Mouse Models of
VENTION: Pathogenesis of Human Disease and Efficacy and Toxicity of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                BOG-139/CIP II
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53;
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US-09-280-799-39/c
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US-09-280-799-40/c
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                                                                    SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 40
LENGTH: 20
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CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 39
LENGTH: 20
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Patent No. 6136603
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
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Best Local Similarity
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                                                                                                                     APPLICANT: Dean, Nicholas M.
APPLICANT: Dean, Nicholas M.
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
TILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
                                                                                                                                                                                                                                                                                                         Patent No. 613660
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APPLICANT: MCKAY, ROBERT
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 20
TYPE: DNA
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                    ORGANISM: Artificial Sequence FEATURE:
                                                       TYPE: DNA
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OTHER INFORMATION: Description of Artificial Sequence:Synthetic
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L00.0%; Pred. No.
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US-09-280-799-41/c
                                                                                                                         ; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-280-799-42
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                                                            Query Match
Best Local S
Matches 20
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CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOPTWARE: PATENTIN Ver. 2.0
SEQ ID NO 41
                                                                                                                                                                                                              FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Loc
Matches
                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKAY, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                           Patent No. 6136603
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APPLICANT: Karras, James G
APPLICANT: KARYAS, ROBERT
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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                                                                                                                                                                     TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                       FEATURE:
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                     688 GCCAATGAGGTAATTTTCTT 707
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Similarity 100.0%;
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   GCCAATGAGGTAATTTTCTT 1
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                                                             Conservative
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0; Mismatches
                                                          Score 20; DB; Pred. No. 57; 0; Mismatches
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Pred. No.
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57;
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57;
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                                        US-09-280-799-45/c
; Sequence 45, Application US/09280799
; Patent No. 6136603
                                                                                           RESULT 49
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 43
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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US-09-280-799-43/c
US-09-280-799-43/c
; Sequence 43, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
                                                                                                                                                ; FEATURE: ; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-280-799-44
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                                                                                                                                                                                                                                      APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 44
LENGTH: 20
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Patent No. 6136603
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                                                                                                             Query Match
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Best Local Similarity
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CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
                                                                                                                                                                                                     ORGANISM: Artificial Sequence
                                                                                                                                                                                                                             TYPE: DNA
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                     895 TCCTCTCCAGACTCTGAGGA 914
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100.0%; Pred. No.
                                                                                           0.6%; Score 20; DB
.00.0%; Pred. No. 57;
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CURRENT APPLICATION UMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 46
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
FEATURE:
GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCRAy, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INFITITE OF INVENTION: ANTISENSE MODULATION OF ITE REFERENCE: 159H-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 47
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US-09-280-799-46/c
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US-09-280-799-46
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Best Local Similarity
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LENGTH: 20
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Best Local Similarity
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FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G APPLICANT: MCKay, Robert
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ORGANISM: Artificial Sequence
FEATURE:
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.00.0%; Pred. No. 57;
.ve 0; Mismatches
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 48
LENGTH: 20
TYPE: DIA
TYPE: DIA
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Best Local Similarity
Watches 20; Conserve
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US-09-280-799-49/c
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US-09-280-799-48/c
                                                  ; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-280-799-49
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                                                                                                                                  FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 49
LENGTH: 20
                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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Patent No. 6136603
GENERAL INFORMATION:
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Best Local Similarity
                  Query Match
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TYPE: DNA
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                                                                                                     TYPE: DNA ORGANISM: Artificial Sequence
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100.0%; Pred. No.
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Best Local Similarity

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RESULT 56
US-09-280-799-52/c
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; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-50
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US-09-280-799-51
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CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 50
LENGTH: 20
                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 51
LENGTH: 20
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: WARRAS, James G
APPLICANT: MCKAY, ROBERT
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
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Best Local (
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APPLICANT: Karras, James G.
APPLICANT: MCKay, Robert
TITLE OP INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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ORGANISM: Artificial Sequence
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100.0%; Pred. No. 57;
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 53
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
COUNTY INFORMATION: Description of Artificial Sequence
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GENERAL INFORMATION:
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
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Patent No. 6136603
GENERAL INFORMATION:
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Patent No. 6136603
GENERAL INFORMATION:
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Patent No. 6136603
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SEQ ID NO 52
LENGTH: 20
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Best Local Similarity
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
FILLE OF INVENTION: TRANSDUCTION
FILE REPERENCE: ISH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
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ORGANISM: Artificial Sequence
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100.0%; Pred. No.
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Best Local S
Matches 20
                               SEQ ID NO 56
LENGTH: 20
TYPE: DNA
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SEQ ID NO 55
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Best Local Similarity
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FILE REFERENCE: ISPH-0340

CURRENT APPLICATION NUMBER: US/09/280,799

CURRENT FILING DATE: 1999-03-26

CURRENT FILING DATE: 1999-03-26

NUMBER OF SEQ ID NOS: 208
                                                                                  FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
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NUMBER OF SEQ ID NOS: 208
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                             TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION
                                                                                                                                                                                                             APPLICANT: Dean, Nicholas M. APPLICANT: Karras, James G APPLICANT: McKay, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
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               ORGANISM: Artificial Sequence
FEATURE:
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57;
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; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-280-799-56
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                                                                                                          US-09-280-799-58
                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 58
LENGTH: 20
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SEQ ID NO 57
LENGTH: 20
TYPE: DNA
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Best Local Similarity
Matches 20; Conserv
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
                                                                                                                                                                                                                                                                                                                                                                                         Sequence 58, Application US/09280799 Patent No. 6136603
                                              Matches
                                                                            Query Match
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Best Local Similarity
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CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
                                                                                                                                                                                                                                                                               TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION FILE REFERENCE: ISPH-0340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: ANTISENSE MODULATION TITLE OF INVENTION: TRANSDUCTION FILE REFERENCE: ISPH-0340
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APPLICANT: McKay, Robert
                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Dean, Nicholas M.
                                                                                                                         OTHER INFORMATION: Description of Artificial Sequence: Synthetic
                                                                                                                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                        TYPE: DNA
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                                                                                                                                         FEATURE:
                                                           Local Similarity
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2135 AAGACGGAGAGTAAACCAAT 2154
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                                              Conservative
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100.0%; Pred. No.
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                                                                            DB 1;
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RESULT 65
US-09-280-799-61/c
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US-09-280-799-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-280-799-60/c
                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 60
LENGTH: 20
                              Sequence 61, Application US/09280799
Patent No. 6136603
GENERAL INFORMATION:
APPLICANT: Dean, Ni
                                                                                                                                                                                              Matches
                                                                                                                                                                                                             Query Match
Best Local (
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Patent No. 6136603
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
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CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
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APPLICANT: McKay, Robert
TITLE OF INVENTION: TRANSDUCTION
TITLE OF INVENTION: TRANSDUCTION
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                                                                                                                                                                                                                                                                                             ORGANISM: Artificial Sequence FEATURE:
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o. 6136603
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TITLE OF INVENTION: ANTISENSE MODULATION OF
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION UMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 61
LENGTH: 20
TYPE: DNA
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US-09-280-799-62
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Patent No. 6136603
GENERAL INFORMATION:
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Matches
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LENGTH: 20
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GENERAL INFORMATION:
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
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CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
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APPLICANT: McKay, Robert
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APPLICANT: McKay, Robert
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                                   ; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-280-799-65
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Best Local Similarity
Matches 20; Conserv
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LENGTH: 20
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Patent No. 6136603
GENERAL INFORMATION:
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LENGTH: 20
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Best Local Similarity
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 Query Match
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GENERAL INFORMATION:
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APPLICANT: Karras, James G
APPLICANT: Karras, James G
APPLICANT: Karras, James G
APPLICANT: MCKAy, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: 159H-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER: OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
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FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
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                                                                            TYPE: DNA
ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
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Pred. No. 57;
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US-09-280-799-67/c
; Sequence 67, Application US/09280799
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SEQ ID NO 67
LENGTH: 20
TYPE: DNA
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CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 66
LENGTH: 20
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GENERAL INFORMATION:
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NUMBER OF SEQ ID NOS: 208
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
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                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/280,799
                                                                                                                                    FEATURE: OTHER INFORMATION: Description of Artificial Sequence:Synthetic
                                                                                                                                                                               ORGANISM: Artificial Sequence
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Pred. No.
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RESULT 73
US-09-280-799-69/c
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; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-280-799-68
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Best Local Similarity
Matches 20; Conserv
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CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 69
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SEQ ID NO 68
LENGTH: 20
                                                                                                      Sequence 70, Appli
Patent No. 6136603
                                                                                     GENERAL INFORMATION:
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Best Local
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CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: MCKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
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APPLICANT: McKay, Robert
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TYPE: DNA
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ORGANISM: Artificial Sequence
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Pred. No. 57;
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US-09-280-799-71/c
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 71
LENGTH: 20
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Best Local Similarity
Matches 20; Conserv
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CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 70
LENGTH: 20
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Best Local Similarity
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SEQ ID NO 152
LENGTH: 20
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                                               CURRENT APPLICATION NUMBER: US/09/758,881
CURRENT FILING DATE: 2001-01-11
PRIOR APPLICATION NUMBER: PCT/US00/09054
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: 09/288,461
PRIOR APPLICATION NUMBER: 09/288,461
PRIOR FILING DATE: 1999-04-08
NUMBER OF SEQ ID NOS: 152
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TITLE OF INVENTION:
FILE REFERENCE: ISP
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                                  PatentIn Ver. 2.1
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100.0%; Pred. No.
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APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTISENSE MODULATION OF IN:
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: ISPN-03409
CURRENT APPLICATION UMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 15
LENGTH: 20
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US-09-371-615A-4/c
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               Query Match
Best Local Similarity
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US-09-280-799-15/c
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                                                                                                ; OTHER INFORMATION: Description of Artificial Sequence:Synthetic US-09-280-799-15
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APPLICANT: IDEXX LABORATORIES
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Best Local Similarity
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1986 TAAAGAAATACATTGACGGC 2005
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Pred. No. 70;
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Pred. No. 69;
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US-09-280-799-72/c
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FILE REFERENCE: ISPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: PATENTIN VEI. 2.0
SEQ ID NO 72
                                                                                                                                                                                                        TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL TITLE OF INVENTION: TRANSDUCTION FILE REFERENCE: ISPH-0340 CURRENT APPLICATION NUMBER: US/09/280,799 CURRENT FILING DATE: 1999-03-26 NUMBER OF SEQ ID NOS: 208 SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 75 LENGTH: 20
                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 75, Application US/09280799 Patent No. 6136603 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 72, Application US/09280799 Patent No. 6136603
                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Dean, Nicholas M.
APPLICANT: Karras, James G
APPLICANT: McKay, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 20
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Karras, James G
APPLICANT: McKay, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Dean, Nicholas M.
                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sach
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                                2416 AAGTATTTTCCTCCAGGCAA 2435
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20 AAGTATTTTCGTCCAGGCAA 1
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                                                                                 Score 18.4;
Pred. No. 69;
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Pred. No. 69;
                                                                Mismatches
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RESULT 81 US-09-371-615A-3

Sequence 3, Application US/09371615A Patent No. 6537781 GENERAL INFORMATION:

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RESULT 82
US-08-319-492B-703
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Matches
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CURRENT APPLICATION NUMBER: US/09/371,615A
CURRENT FILING DATE: 1999-08-10
NUMBER OF SEQ ID NOS: 8
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 3
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                             APPLICATION NUMBER: US/08/319,492B
FILING DATE: October 7, 1994
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA: including application
PRIOR APPLICATION DATA: described below:
APPLICATION NUMBER: 08/008,895
FILING DATE: January 19, 1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/ACENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 703, Application US/08319492B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Sulliva
APPLICANT: Draper,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: IDEXX LABORATORIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Canis familiaris
                 NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ITLE OF INVENTION: METHODS AND COMPOSITIONS CONCERNING ITLE OF INVENTION: CANINE INTERLEUKIN 5
                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: Surc
STREET: Los Angeles
CITY: California
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: RIBOZYME TREATMENT OF DISEASES TITLE OF INVENTION: OR CONDITIONS RELATED TO LEVELS TITLE OF INVENTION: OF IL-5 NUMBER OF SEQUENCES: 751
                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM COM
OPERATING SYSTEM:
                                                                                                             NAME: Warburg, Richard REGISTRATION NUMBER: 32 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          635 CATTGGTGAAAGAGACCTTG 654
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19; Conserv
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CHARACTERISTICS
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Stinchcomb, Dan T.
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                                                                                                                   32,327
ER: 20
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                                                                                                             209/276
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Pred. No. 69
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                                                            US-08-319-492B-705
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Best Local Similarity 72.2
               Query Match
Best Local Similarity
 Matches
                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/319,492B

FILING DATE: October 7, 1994

PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA: including application
PRIOR APPLICATION DATA: described below:
APPLICATION NUMBER: 08/008,895

FILING DATE: January 19, 193

APPLICATION NUMBER: 07/989,889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent No.
                                                                                                                                                  TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Did
MEDIUM TYPE: storage
COMPUTER: IBM Compat:
                                                                                                                                                                                                                                                                  FILING DATE: December 7, 1992 ATTORNEY/AGENT INFORMATION:
                                                                                                                                  SEQUENCE CHARACTERISTICS
                                                                                                                                                                                          TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                       LENGTH:
                                                                                                                                                                 TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM: IBM P.C. SOFTWARE: Word Perfect 5.1
                                                                                                                                                                                                                         REGISTRATION NUMBER: 32,327 REFERENCE/DOCKET NUMBER: 20
                                                                                      STRANDEDNESS: single
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                                                                                                : 18 base pairs
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0.6%;
nilarity 61.1%;
Conservative
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Stinchcomb, Dan T.
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OR CONDITIONS RELATED TO LEVELS
OF IL-5
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 Score 18; DB Pred. No. 67; 7; Mismatches
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Pred. No.
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RESULT 85
US-08-319-492B-709
; Sequence 709, Application US/08319492B
; Patent No. 5616488
; Patent No. 5616488
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 GENERAL INFORMATION:
APPLICANT: Sullivantion Draper,
APPLICANT: McSwigg
                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 18 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/008,895
FILING DATE: January 19, 1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/31:
FILING DATE: October 7, 1994
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA: includ
PRIOR APPLICATION DATA: descrii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C.
SOFTWARE: WOR'D PERFECT 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Sullivan, Sean M.
APPLICANT: Draper, Kenneth G.
APPLICANT: MCSwiggen, James
APPLICANT: Stinchcomb, Dan T.
TITLE OF INVENTION: OR CONDITIONS RELATED TO LEVELS
TITLE OF INVENTION: OF CONDITIONS RELATED TO LEVELS
TITLE OF INVENTION: OF IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Warburg, Richard REGISTRATION NUMBER: 32,327 REFERENCE/DOCKET NUMBER: 209/276
                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                            674 GAACTCTGCTGATAGCCA 691
                                                                                                                                                                                                                                                               14; Conservative
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California
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Sullivan, Sean M.
Draper, Kenneth G.
McSwiggen, James
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   including application described below:
                                                                                                                                                                                                                                                           Score 18; DB 1;
Pred. No. 67;
4; Mismatches
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RESULT 86
US-08-434-503-42
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Matches
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Best Local Similarity 61.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA: including application PRIOR APPLICATION DATA: including application PRIOR APPLICATION DATA: described below: APPLICATION NUMBER: 08/008,895
FILING DATE: January 19, 1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/ACENT INFORMATION:
NAME: Warburg, Richard
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 209/276
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Stinchcom
                                                                                                                                                                                                                                                      APPLICANT: Kenneth G. Draper
TITLE OF INVENTION: METHOD AN
TITLE OF INVENTION: TREATMENT
TITLE OF INVENTION: DISEASE
NUMBER OF SEQUENCES: 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 18 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM D.C.
SOFTWARE: WORD PERFECT 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
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COMPUTER READABLE FORM:
                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/319,492B FILING DATE: October 7, 1994
                                                                                                                                                            ADDRESSEE:
STREET: 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 18 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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STATE: California
                                                                                             CITY: Los Angeles
STATE: California
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STREET: 633 West Fifth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
TOPOLOGY: lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                913 GATTCCTGTTCCTGTACA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GAUUCCUGUUCCUGUACA 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/08434503
                                                                                                                                                            E: Lyon & Lyon
611 West Sixth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stinchcomb, Dan T.
VENTION: RIBOZYME TREATMENT OF DISEASES
VENTION: OR CONDITIONS RELATED TO LEVELS
VENTION: OF IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                         Sean M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                             Sullivan
                                                                                                                                                                                                                                                                                                                               METHOD AND REAGENT FOR TREATMENT OF INFLAMMATORY
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Pred. No.
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67;
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MEDIUM TYPE: 3.5 LIBROWN COMPUTER: IBM COMPETABLE: 1 PM COMPETABLE: 1 PM MS-DOS (Version 5.0) SOFTWARE: WordPerfect (Version 5.1) CURRENT APPLICATION NUMBER: US/08/434,503 FILING DATE: 04-MAY-1995 PRIOR APPLICATION DATA: APPLICATION NUMBER: US/08/08,895 PRIOR APPLICATION NUMBER: US/08/08,895 PRIOR APPLICATION NUMBER: US/08/08,895 PILING DATE: December 7,1992 APPLICATION NUMBER: 07/989,849 FILING DATE: December 7,1992 ATTORNEY/AGENT INFORMATION: NAME: Warburg, Richard J. PRICEMBER: Warburg, Richard J. PRICEMBER: Warburg, Richard J. PRICEMBER: 32,327
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APPLICANT: Sean M. Sullivan
APPLICANT: Kenneth G. Draper
APPLICANT: Kenneth G. METHOD AND REAGENT FOR
TNVENTION: METHOD AND REAGENT FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 13; Conservative
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: (213) 489-1600 TELEFAX: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM: MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
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CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Match 0.6%;
Local Similarity 72.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: 3.5" Disket
COMPUTER: IBM COmpatible
OPERATING SYSTEM: IBM MS
                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200/276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Warburg, Richard J. REGISTRATION NUMBER: 32,3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
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Pred. No. 67;
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RESULT 88
US-08-434-503-51/c
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Best Local Similarity
Matches 12; Conserv
Query Match 0.6%; Score 17.8; I
Best Local Similarity 75.9%; Pred. No. 90;
Matches 22; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent No. 5616490 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA: 08/008,895
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/ACENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Sean M. Sulli
APPLICANT: Kenneth G. D.
TITLE OF INVENTION: TREE
TITLE OF INVENTION: TREE
TITLE OF INVENTION: DISS
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                        NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: 3.5" Di
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: WordPerfect CURRENT APPLICATION DATA:
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                                                                                                                                                                             TELEFAX: 14--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 611 West S:
CITY: Los Angeles
STATE: California
COUNTRY: USA
                                                                                                                                                                                             TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
                                                                                                   STRANDEDNESS: single
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                                                                                                                                       LENGTH:
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                                                                                                                   nucleic acid
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611 West Sixth Street
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Kenneth G. Draper
VENTION: METHOD AND REAGENT FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (213) 955-0440
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.5" Diskette, 1.44 Mb storage
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                                                                                                                                                                           51:
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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                                  DB 1; Length 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
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RESULT 89
US-08-420-244-4
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                                                                                                                                                                                                                                                  Sequence 5, Application US/09259411
Patent No: 6489306
                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
              APPLICANT: MAISUSE, HITCLO
APPLICANT: Behera, Aruna K.
APPLICANT: Behera, Aruna K.
APPLICANT: Behera, Mukesh
APPLICANT: Kumar, Mukesh
TITLE OF INVENTION: METHOD OF INTRANASAL GENE TRANSFER FOR PROTECTION
TITLE OF INVENTION: AGAINST RESPIRATORY INFECTION
FILE REFERENCE: 0152.00312
CURRENT APPLICATION NUMBER: US/09/259,411
CURRENT FILING DATE: 1999-02-23
PRIOR APPLICATION NUMBER: 60/075,588
PRIOR FILING DATE: 1998-02-23
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APPLICANT: Hu, SP
                                                                                                                                                    APPLICANT: Mohapatra, Shyam S. APPLICANT: Matsuse, Hiroto APPLICANT: Behera, Aruna K. APPLICANT: Kumar, Mukesh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: (617) 542-5070 TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: TBAO, Y. ROCKY
REGISTRATION NUMBER: 34,053
REFERENCE/DOCKET NUMBER: 00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Hu, Shixing TITLE OF INVENTION: TR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRESENT TREE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Palana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/420,244
FILING DATE: 07-APR-1995
CLASSIFICATION: 514
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STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
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Pred. No. 75;
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OPERATING SYSTEM: IBM MS-DOS (Version 5.0)
SOFTWARE: WordDerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION 1435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REGISTRATION NUMBER: 32,327
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200/276
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION: (213) 489-1600
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Best Local Similarity 94.7%;
Matches 18; Conservative
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                                                                   Matches
                                                                                Query Match
Best Local Similarity
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ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: N
TITLE OF INVENTION: I
TITLE OF INVENTION: I
NUMBER OF SEQUENCES:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
COMPUTER: IBM Compatible
COMPUTER: TANK MC DOC (Variation 5.0)
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STREET: COS Angeles
CITY: LOS Angeles
CTATE: California
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                                                                                                                                                                      STRANDEDNESS:
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                                                                                                                                                          TOPOLOGY:
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                                 518 CTTTGCCAAAGGCAAAC 534
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                                                                                                                                                                      nucleic acid
EDNESS: single
CUUUGCCAAAGGCAAAC 17
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611 West Sixth Street
                                                                   Conservative
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                                                                                  0.5%; Score 17;
82.4%; Pred. No.
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METHOD AND REAGENT FOR
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Pred. No. 77;
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                                                                     Mismatches
                                                                                                      DB 1;
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RESULT 94
US-08-358-171-14
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Best Local Similarity
"hes 17; Conserve
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US-09-280-799-16
Sequence 14, Application US/08358171 Patent No. 5763578
                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 6
LENGTH: 18
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Best Local Similarity 90.0%;
Matches 18; Conservative
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LENGTH: 20
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APPLICANT:
APPLICANT:
APPLICANT:
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APPLICANT: Karras, James G
APPLICANT: McKay, Robert
TITLE OF INVENTION: ANTIGENSE MODULATION OF INTERLEUKIN-5 SIGNAL
TITLE OF INVENTION: TRANSDUCTION
FILE REFERENCE: 1SPH-0340
CURRENT APPLICATION NUMBER: US/09/280,799
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: METHOD OF INTRANASAL GENE TRANSFER FOR PROTECTION TITLE OF INVENTION: AGAINST RESPIRATORY INFECTION FILE REFERENCE: 0152.0312
CURRENT APPLICATION NUMBER: US/09/259,411
CURRENT FILING DATE: 1999-02-23
PRIOR APPLICATION NUMBER: 60/075,588
PRIOR FILING DATE: 1998-02-23
                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
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ORGANISM: Artificial Sequence
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                                                                                                                                           2168 GCAAGAGTTTCTTGGTGT 2185
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Behera, Aruna K.
Kumar, Mukesh
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Pred. No. 82
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US-09-090-947-14
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
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TITLE OF INVENTION: I
TITLE OF INVENTION: I
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
COMPUTER: IBM PC com
                                           SOPTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/090,947
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEFAX: 202-737-3528
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TITLE OF INVENTION: ALL TRANS-RETINALDEHYDE BINDING PROTEIN,
TITLE OF INVENTION: ENCODING SAME, AND ANTIBODIES THERETO
                                                                                                                                                                                                  STREET: 419 Sevent CITY: Washington STATE: D.C.
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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REGISTRATION NUMBER: 37,971
REFERENCE/DOCKET NUMBER: FO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/358,171 FILING DATE: 16-DEC-1994 CLASSIFICATION: 530
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ZIP: 20004
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                                FILING DATE:
                                                                                                                                                                                                                                                              ADDRESSEE:
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            CLASSIFICATION:
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419 Seventh Street, N.W., Suite 300
                                                                                                                                                                                         USA
                                                                                                                                                                                                                                          E: BROWDY AND NEIMARK
419 Seventh Street, N
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Pred. No. 86;
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                                                                                                                                                                                                          Sequence 1, Application US/09079839
Patent No. 6048726
GENERAL INFORMATION:
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                         APPLICANT: Weltman, Joel K.
APPLICANT: Karin, Aftab S.
TITLE OF INVENTION: INHIBITION OF EOSINOPHILIC INFLAMMATION
FILE REFERENCE: 0998/002001
CURRENT APPLICATION NUMBER: US/09/079,839
CURRENT FILING DATE: 1998-05-15
NUMBER OF SEQ ID NOS: 2
SOFTMARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1
LENGTH: 16
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LENGTH: 20
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APPLICANT: Griffais, R.
TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, frac
TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis,
TITLE OF INVENTION: and treatment of infection
FILE REFERENCE: 9710-003-999
FILE REFERENCE: 9710-003-999
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Best Local
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ORGANISM: Chlamydia pneumoniae
-09-198-452A-5483
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TELEX: 248633
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 202-628-5197
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linear
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Pred. No. 86;
0; Mismatches
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Pred. No. 8
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RESULT 98
US-09-322-409-134
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US-09-451-527-134
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LENGTH: 16
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                                                                                                    SOFTWARE: Pa
SEQ ID NO 134
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Best Local Similarity 100.0%;
Matches 16; Conservative (
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GENERAL INFORMATION:
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Patent No. 6482403
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Patent No. 6471957
                                                                                                                                APPLICANT: Dreitz, Matthew J.

APPLICANT: Wonderling, Ramani S.

APPLICANT: Wonderling, Ramani S.

ITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF FILE REFERENCE: IM-2-C2

CURRENT ENTING DATE: 1999-12-01

EARLIER APPLICATION NUMBER: 09/322,409

EARLIER FILING DATE: 1999-05-28

EARLIER FILING DATE: 1999-05-28

EARLIER APPLICATION NUMBER: 60/087,306

EARLIER FILING DATE: 1998-05-29

NUMBER OF SEQ ID NOS: 174

COUNTAINED: DESCRITT USE OF 100 NOT THE NUMBER: 05 SEQ ID NOS: 174
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EARLIER FILING DATE: 1998-05-29
NUMBER OF SEQ ID NOS: 154
SOPTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/322,409
CURRENT FILING DATE: 1999-05-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Dreitz, Matthew J.
APPLICANT: Wonderling, Ramani S.
TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Sim, Gek-Kee APPLICANT: Yang, Shumin
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ORGANISM: Artificial Sequence
FEATURE:
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                                        ORGANISM: Artificial Sequence
                                                                  TYPE:
                         FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:
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CURRENT APPLICATION NUMBER: US/09/422,978
CURRENT FILING DATE: 1999-10-20
EARLIER APPLICATION NUMBER: US 09/298,850
EARLIER FILING DATE: 1999-04-21
EARLIER APPLICATION NUMBER: US 60/109,732
EARLIER FILING DATE: 1998-11-23
EARLIER APPLICATION NUMBER: US 60/082,614
EARLIER FILING DATE: 1998-04-21
NUMBER OF SEQ ID NOS: 11796
SEQ ID NO 5006
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                                                                     ; SEQ ID NO 5765
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Chlamydia pneumoniae
US-09-198-452A-5765
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                                                                                                                                                          Sequence 5765, Application US/09198452A
Patent No. 6559294
GENERRAL INFORMATION:
APPLICANT: Griffais, R.
TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragment;
TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, previous of INVENTION: and treatment of infection
FILE REFERENCE: 9710-003-99
CURRENT APPLICATION NUMBER: US/09/198,452A
CUGRENT FILING DATE: 1998-11-24
NUMBER OF SEQ ID NOS: 6849
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Best Local S
Matches 16
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APPLICANT: Cohen, Daniel
APPLICANT: Blumenfeld, Marta
APPLICANT: Chumakov, Ilya
TITLE OF INVENTION: Biallelic markers for use
FILE REFERENCE: GENSET.020CP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent No. 65377
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Best Local
                                       Query Match
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NAME/KEY: primer_bind
LOCATION: 1..19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
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                  Local
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al Similarity 100.0%;
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0.5%; Score 16; DB
100.0%; Pred. No. 89;
tive 0; Mismatches
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                                   Length 20;
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                                                                                                                                                                 US-09-331-347C-5/c
                                                                                                                                                                                    RESULT 103
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APPLICANT: Sean M. Sull:
APPLICANT: Kenneth G. D:
TITLE OF INVENTION: METI
TITLE OF INVENTION: TREE:
TITLE OF INVENTION: DISI
NUMBER OF SEQUENCES: 54
                                                                                                        Sequence 5, Application US/09331347C Patent No. 6617431 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 53, Appli
Patent No. 5616490
                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
APPLICANT: Meristem Therapeutics, S.A.
APPLICANT: Meristem Therapeutics, S.A.
TITLE OF INVENTION: Recombinant Collagens and Derived Proteins Produced by Plants,
TITLE OF INVENTION: obtaining Such and Their Uses
FILE REFERENCE: 1149-3
CURRENT APPLICATION NUMBER: US/09/331,347C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/434,503
FILING DATE: 04-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/008,895
FILING DATE: 19-JAN-1993
APPLICATION NUMBER: 07/989,849
FILING DATE: December 7, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (213) 955-04-
TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM MS-DOS (Versi
SOFTWARE: Wordberfect (Version 5.1)
CURRENT APPLICATION DATA:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (213) 955-0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 200/276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 611 West SCITY: Los Angeles STATE: California
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TOPOLOGY: lir
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611 West Sixth Street
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METHOD AND REAGENT FOR
TREATMENT OF INFLAMMATORY
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Pred. No.
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CURRENT FILING DATE: 1999-08-17

NUMBER OF SEQ ID NOS: 22

SOFTWARE: PatentIn version 3.1

SEQ ID NO 5

LENGTH: 17

TYPE: DNA

CRGANISM: Artificial Sequence
FEATURE:

OTHER INFORMATION: oligonuclectide BIOC7

US-09-331-347C-5

Query Match
Best Local Similarity 94.1%; Pred. No. 87;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Somethes 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Somethes 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Somethes 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Somethes 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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RESULT 117
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Best Local S
Matches 20
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                                                                                                                                                                                      Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human Interleukin 5 antisense oligonucleotide ISIS 16095
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                                                                                                                                                                                                                                                                                                                        26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
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                                                                                                                                                                                                                                                                               (KARR/)
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) KARRAS J G.
) MCKAY R.
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ressant; eosinophilic syndrome;
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The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of II-5 receptor a. The antisense compound is useful for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of mammalian II-5 receptor a in cells or tissues, for altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues, treating a mammalian laving a disease or condition associated with II-5 signal transduction,

expression or IL-5

receptor a expression,

the disease

Claim

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19; 77pp;

English

transduction

expression or IL-5 signal

transduction,

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RRESULT 118
ABX04352/c
IID ABX04352/c
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IID 13-JAN
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IIID Human
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IIID 12-SEP
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                  CC The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (IL)-5 signal transduction. Also CC include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and CC a diagnostic kit for detecting the expression level of the membrane form CC versus soluble form of IL-5 receptor a. The antisense compound is useful CC for modulating IL-5 signal transduction, modulating expression of CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC in-5 expression or IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC condition include eosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding IL-5 receptor a is also useful CC for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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17-MAR-2000; 2000WO-US007318
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KARRAS J G.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MCKAY R.
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r condition. The present sequence
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                                                                                  The invention relates to an antisense compound of 8-30 nucleobases in Clength, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense colligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form conditions of the signal transduction, modulating capression of the seful for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of mammalian II-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian CL in receptor a in mammalian cells or tissues, treating a mammalian CC in a disease or condition associated with II-5 signal transduction, CC II-5 expression or II-5 receptor a expression, where the disease or compound cC which alters splicing of an RNA encoding II-5 receptor a is also useful CC is an antisense oligonucleotide targetting human IIS
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17-MAR-2000;
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) KARRAS J G.
) MCKAY R.
) MANOHARAN M.
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2000WO-US007318
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100.0%; Pred. No. 1.1e+02;
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                                                                                                                                                                                                                                     The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (II)-5 signal transduction. Also CC include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and CC versus soluble form of II-5 receptor a. The antisense compound is useful CC versus soluble form of II-5 receptor a. The antisense compound is useful CC for modulating II-5 signal transduction, modulating expression of CC mammalian II-5 or modulating the expression of mammalian II-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian CC in-5 receptor a in mammalian cells or tissues, for altering the ratio of the isoforms of mammalian CC II-5 receptor a in mammalian cells or tissues, treating a mammalian CC condition include eosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding II-5 receptor a is also useful CC for treating a mammal having a disease or condition. The present sequence is an antisense coligonucleotide targetting human II5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 120
                                                                   Matches
                                                                                                                            Query Match
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(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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      895 TCCTCTCCAGACTCTGAGGA 914
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                                                                                                                                                                                         BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Page 19;
                                                                   Conservative
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                                                                                                                                   Sequence 20
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17-MAR-2000; 2000WO-US007318
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                              895 TCCTCTCCAGACTCTGAGGA 914
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KARRAS
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                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MCKAY R.
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                                                                                                                                   BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
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                                                                  Conservative
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                                                                                                 Length 20;
                                                                Indels
                                                              0,
                                                              Gaps
                                                                                                                                                                                     sequence
                                                                0,
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ABX04354/c ID ABX043 XX

ABX04354 standard;

DNA;

20 ВP

Human Interleukin 5 antisense oligonucleotide ISIS

13-JAN-2003

(first

entry)

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0

RESULT 122

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RESULT 123
ABX04367/c
ID ABX043
XX
AC ABX043
XX
DT 13-JAN
XX
DE Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (II)-5 signal transduction. Also CC include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and CC a diagnostic kit for detecting the expression level of the membrane form CC versus soluble form of IL-5 receptor a. The antisense compound is useful CC for modulating IL-5 signal transduction, modulating expression of CC mammalian IL-5 or modulating the expression of the isoforms of mammalian CC in cells or tissues, for altering the ratio of the isoforms of mammalian CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC condition include eosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding IL-5 receptor a is also useful CC for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-MAR-2001; 2001US-00800629
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; 88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human Interleukin 5 antisense oligonucleotide ISIS 16085
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                            ABX04367;
                                                                                                                                      ABX04367 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      L7-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .mmunosuppressant;
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KARRAS J G.

MCKAY R.
                                                                                                                                                                                                                                                                                                                                                           Similarity
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                                                                                                                                                                                                                                                                                            GTCAAACTGTGCAAGGGGGT 1951
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-00280799.
2000WO-US007318.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   77pp;
                                                                                                                                        DNA;
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                                                                                                                                                                                                                                                                                                                                                             0.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mckay R,
                                                                                                                                        20
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                                                                                                                                        ВP
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Pred. No.
                                                                                                                                                                                                                                                                                                                                           Mismatches
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. 1.1e+02
                                                                                                                                                                                                                                                                                                                                           0
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RESULT 124
ABX04370/c
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Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a in mammalian cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian lancells or tissues, treating a mammalian having a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (IL)-5 signal transduction. Also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
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                                        Homo sapiens
                                                                               immunosuppressant;
                                                                                                        Human; ss;
                                                                                                                                                 Human Interleukin 5 antisense oligonucleotide ISIS 16101.
                                                                                                                                                                                               13-JAN-2003
                                                                                                                                                                                                                                                                                   ABX04370
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-039602/03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-SEP-2002
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immunosuppressant; eos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (/ONAM)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                an antisense oligonucleotide targetting human ILS
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MCKAY R.
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                                                                                                                                                                                                                                                                                                                                                                                                                         GCCAATGAGGTAATTTTCTT 707
                                                                                                                                                                                                                                                                                     standard;
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                                                                                 antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
ressant; eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.6%;
ilarity 100.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 8 A;
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                                                                                                                                                                                                                                                                                 DNA;
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eosinophilic syndrome; asthma.
                                                                                                                                                                                             entry)
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C;
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                                                                                                                                                                                                                                                                                     20
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Pred. No.
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1.1e+02;
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밁 5

12-SEP-2002

US2002128216,-A1 Homo sapiens immunosuppressant;

Human; 88;

antisense; interleukin 5;

eosinophilic

syndrome;

IL-5; IL-5 receptor; antiasthmatic;

0

Human Interleukin 5 antisense oligonucleotide ISIS 16077

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ABX04346/c
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                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (II)-5 signal transduction. Also CC include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form CC versus soluble form of IL-5 receptor a. The antisense compound is useful CC for modulating IL-5 signal transduction, modulating expression of CC in cells or tissues, for altering the expression of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC in Freeptor a in mammalian cells or tissues, treating a mammalian CC IL-5 expression or IL-5 receptor a spondation associated with IL-5 signal transduction, CC iL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding IL-5 receptor a is also useful CC for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
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                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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(KARR/)
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17-MAR-2000; 2000WO-US007318
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                                                                                                                                                                                              ABX04346
                                                                                                                                                                                                                        ABX04346 standard; DNA;
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KARRAS J
                                                                                                                                                                                                                                                                                                                                                   Similarity
20; Conserv
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100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                           2 C; 7 G; 5 T; 0 U; 0 Other;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                  Pred.
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RESULT 126
ABX04357/c
ID ABX043
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 20
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17-MAR-2000; 2000WO-US007318
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             26-MAR-1999; 99US-00280799.
17-MAR-2000; 2000WO-US007318.
                                                     07-MAR-2001; 2001US-00800629
                                                                                                               US2002128216-A1
                                                                                                                                            Homo sapiens. .
                                                                                                                                                                        immunosuppressant;
                                                                                                                                                                                      Human;
                                                                                                                                                                                                                  Human Interleukin 5 antisense oligonucleotide ISIS 16088
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                                                                                                                                                                                                                                                                                                                                                                                                           905
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20; Conserv
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KARRAS J G.
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                                                                                                                                                                                                                                                                                                        standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                           ACTCTGAGGATTCCTGTTCC 924
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Karras JG,
                                                                                                                                                                                     antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7 A;
                                                                                                                                                                        se; interleukin 5;
eosinophilic synd;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  σ
                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 20; DB; Pred. No. 1.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                G; 3 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Manoharan
                                                                                                                                                                        syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0 U;
                                                                                                                                                                                     IL-5; IL-5 receptor; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                        1.1e+02;
hes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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(DEAN/) DEAN N M.
(KARR/); KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                      mammalian II-5 or modulating the expression of mammalian II-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with II-5 signal transduction, II-5 expression or II-5 receptor a expression, where the disease or condition include eosimophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding II-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human II-5
                                                                                                                                                                                                                                                   The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of
Sequence 20 BP; 8 A; 5 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 20; Page 19; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-039602/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense compound for treating disease/condition e.g. eosinophilic ome or asthma associated with interleukin-5 or IL-5 receptor ssion or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Manoharan
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á 밁 Query Match Best Local (Matches Local 20; Similarity Conservative 0.6%; 0; Score 20; Pred. No. Mismatches DB 1; 1.1e+02; 0, Length 20; Indels 0; Gaps 0

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RASULT 127
ABX04369/c
ID ABX043
XX ABX043
AC ABX043
XX ABX043
XX Human
XX Human
XX Human
XX Homo s
XX Homo s
XX I FAR
Y 17-SEP
XX 12-SEP
XX 12-SEP
XX 17-MAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human Interleukin 5 antisense oligonucleotide ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABX04369 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
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Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;

eosinophilic syndrome; asthma

26-MAR-1999; 17-MAR-2000;

99US-00280799 2000WO-US007318

07-MAR-2001; 2001US-00800629

12-SEP-2002

U\$2002128216-A1

Homo sapiens

immunosuppressant;

(DEAN/) (KARR/)

DEAN N M. KARRAS J G. MCKAY R.
MANOHARAN M

(MCKA/)

Dean

M.

Karras

, g

Mckay

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Manoharan

Z

Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal

Example transduction.

20;

Page 19;

77pp; English.

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RESULT 128
ABX04341/c
ID ABX043
XX ABX043
XX ABX043
XX INTERPRENE INTERPRENE IT - MAF
XX IN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an antisense compound of 8-30 nucleobases in Clength, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense coligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian chaving a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
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Best Local (
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                                                           WPI; 2003-039602/03
                                                                                                                 Dean NM,
                                                                                                                                                                                                                                                                                                       26-MAR-1999;
17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                   07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                               12-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2002128216-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunosuppressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human Interleukin 5 antisense oligonucleotide ISIS 16072.
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                                                                                                                                                                                                (KARR/)
                                                                                                                                                                       (MANO/)
                                                                                                                                                                                                                                                         (DEAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  928
        antisense compound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                              DEAN N M.
KARRAS J G.
MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ss; antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                       MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACATAAAAATGTAAGTTAAA 947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACATAAAATGTAAGTTAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                              Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                         99US-00280799.
2000WO-US007318.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 C; 1 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    interleukin
                                                                                                                 Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                 ₽,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                 Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5; IL-5; IL-5 receptor; antiasthmatic;
  disease/condition e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              asthma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of II-5 receptor a. The antisense compound is useful for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of mammalian II-5 receptor a for altering the expression of the isoforms of mammalian II-5 receptor a for altering the ratio of the isoforms of mammalian II-5 receptor a for altering the ratio of the isoforms of mammalian having a disease or condition associated with II-5 signal transduction, II-5 expression or II-5 receptor a expression, where the disease or
                                                        condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 20; Page 19; 77pp; English
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á 밁 Query Match Best Local 8 Matches 523 CCAAAGGCAAACGCAGAACG 542 20 20; Similarity CCAAAGGCAAACGCAGAACG Conservative 0.6%; <u>,</u> Score 20; Pred. No. Mismatches 1.1e+02; DB 1; 0 Length 20 Indels 0, Сарв 0

Sequence 20

BP; 0 A; 5 C; 6 G; 9 T; 0 U; 0 Other;

RESULT 129
ABX04347/c
ID ABX043
XX ABX043
XX ABX043
XX Human
XX Human
XX Human
XX Homo a
XX I US2002
XX US2002
XX I OF AMAR
PF 07-MAR
XX (DEAN/
PA (MCXA/
PA (MCXA/
PA (MANO/
YX US2002
XX (Dean)
XX (Dean)
XX (Dean)
XX (Dean)
YX (MANO/
YX (Dean)
XX (MANO/
YX (Dean)
XX (MANO/
YX Homo sapiens ABX04347 standard; DNA; Human; ss; 13-JAN-2003 ABX04347; immunosuppressant; Interleukin 5 antisense antisense; interleukin 5; IL-5; IL-5 receptor; (first eosinophilic syndrome; asthma entry) 20 ВP oligonucleotide ISIS 16078 antiasthmatic;

US2002128216-A1.

12-SEP-2002

07-MAR-2001; 2001US-00800629

26-MAR-1999; 99US-00280799 17-MAR-2000; 2000WO-US007318

(DEAN/) DEAN N M. (KARR/) KARRAS J G. (MCKA/) MCKAY R. (MANO/) MANOHARAN M.

Dean NM Karras JG, Mckay , 70 Manoharan

WPI; 2003-039602/03

Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal transduction

Example 20; Page 19; 77pp; English

for

treating

eosinophilic

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RESULT 130
ABX04351/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CC The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense CC include are a pharmaceutically acceptable carrier or diluent, and diagnostic kit for detecting the expression level of the membrane form CC versus soluble form of II-5 receptor a. The antisense compound is useful CC for modulating II-5 signal transduction, modulating expression of cc mammalian II-5 or modulating the expression of mammalian II-5 receptor a, cclls or tissues, for altering the ratio of the isoforms of mammalian CC II-5 receptor a in mammalian cells or tissues, treating a mammalian CC thaving a disease or condition associated with II-5 signal transduction, CC condition include cosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding II-5 receptor a is also useful CC for treating a mammal having a disease or condition. The present sequence is an antisense oligonuclectide targetting human II-5
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Best Local Similarity
Matches 20; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABX04351 standard;
                                                                                                                                                                                                                                               (DEAN/)
(KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABX04351;
                                                                                                                      Novel antisense compound syndrome or asthma assoc:
                                                                                                                                                                                                                                                                                                                            07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                    US2002128216-A1
                                                                                                                                                                                                                                                                                     17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                                                                                                                                  26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                        12-SEP
                                                                                                                                                                                                                                                                                                                                                                                                                                       immunosuppressant;
                                                                                                                                                                                                                     (MANO/)
                                                                                                                                                                                                                                  MCKA/)
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                                                                                                                                                              2003-039602/03
                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Interleukin 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       88;
                                                                                                                                                                                                                             DEAN N M.
KARRAS J G.
MCKAY R.
                                                                                                                                                                                                                   MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACATAAAATGTAAGTTAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACATAAAAATGTAAGTTAAA
                                                                                                                                                                                       Karras JG,
                                                                                                       sense compound for treating disease/condition e.g. eosinophilic
r asthma associated with interleukin-5 or IL-5 receptor
or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 5 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first
                                                                                                                                                                                                                                                                                                  99US-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                          eosinophilic syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 C; 1 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      interleukin 5;
                                                                                                                                                                                        Mckay
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70
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Pred. No. 1.1
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oligonucleotide ISIS 16082.
                                                                                                                                                                                        Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                      IL-5; IL-5 receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                          asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                       antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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The invention relates to an antisense compound of 8-30 nucleobases length, which modulates interleukin (II)-5 signal transduction. Al include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or dilue

nucleobases

The invention relates to an antisense compound of 8-30 nucleobases i length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent a diagnostic kit for detecting the expression level of the membrane versus soluble form of II-5 receptor a. The antisense compound is us for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of faminalian II-5 or modulating the expression of the isoforms of mammalian II-5 or modulating the expression of the isoforms of mammalian II-5 or modulating the expression of the isoforms of mammalian II-5 or modulating the expression of the isoforms of mammalian II-5 or modulating the expression of the isoforms of mammalian II-5 or modulating the expression of the isoforms of mammalian II-5 or modulating the expression of the isoforms of mammalian II-5 or modulating the expression of the isoforms of mammalian II-5 or modulating the expression of the isoforms of mammalian II-5 or modulating the expression of mammalian II-5

r diluent, am

15

useful

receptor

Example

20; Page 19;

77pp; English

diluent,

77pp;

English

expression

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RESULT 131
ABXO4360/c
ID ABXO43
XX ABXO43
XX ABXO43
AC ABXO40
AC A
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                               Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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MCKAY R.
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ressant; eosinophilic syndrome; asthma.
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Pred. No. 1.1
Mismatches
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RESULT 132
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Best Local :
                                             The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of II-5 receptor a. The antisense compound is useful for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of mammalian II-5 receptor a in mammalian cells or tissues, for altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues, transduction, having a disease or condition associated with II-5 signal transduction, transduction, and transduction is transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        having a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
IL-5 expression or IL-5 receptor a expression, where the disease condition include eosinophilic syndrome or asthma. An antisense which alters splicing of an RNA encoding IL-5 receptor a is also
                                                                                                                                                                                                                                                                                         Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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17-MAR-2000; 2000WO-US007318
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                                                                                                                                                                                                                                              Example
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) KARRAS J G.
) MCKAY R.
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20; Conserv
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sinophilic syndrome; asthma.
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RESULT 133
ABX04371/c
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                                      length, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                             Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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                                                                                                                                                                                                                                                                                                                 transduction
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17-MAR-2000; 2000WO-US007318
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                             oligonucleotide targetting
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                                                                                                                                                                                                                                                                                                                                                                                                                       Manoharan
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20;
                                                                                                                                                                                                                                                      compound of 8-30 nucleobases
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Query Match Best Local Similarity

100.0%;

Score 20; Pred. No.

Length 20

RESULT 135 ABX04359/c

ABX04359;

13-JAN-2003

(first entry)

US2002128216-A1

Homo

sapiens

Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; immunosuppressant; eosinophilic syndrome; asthma.

Human Interleukin 5 antisense oligonucleotide ISIS 16090

ABX04359 standard;

DNA;

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20 AAGAAATACATTGACGGCCA

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0.6%;

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RESULT 134
ABX04355/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; immunosuppressant; eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                            ABX04355;
                                                                                                                                                                         transduction.
                                                                                                                                                                                                                 WPI; 2003-039602/03
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                                                                                                                                                                                                                                                                                                                                   12-SEP-2002
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                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABX04355 standard;
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17-MAR-2000; 2000WO-US007318
                                                                                                                                                       Example 20; Page 19; 77pp; English.
                                                                                                                                                                                                                                                               (KARR/)
                                                                                                                                                                                                                                                           MCKA/)
                                                                                                                                                                                                                                                                          (DEAN/)
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                                                                                                                                                                                                                                                              ) DEAN N M.
N KARRAS J G.
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                                                                                                                                                                                                                                                 MANOHARAN M
                                                                                                                                                                                                                                                           MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGGCCAAAAAGTAAGTTACA 1
                                                                                                                                                                                                                                 Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
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                                                                                                                                                                                                                                 Manoharan
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1.1e+02;
hes 0;
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The invention relates to an antisense compound of 8-30 nucleobases in clength, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian in IL-5 receptor a in mammalian cells or tissues, treating a mammalian in IL-5 expression or IL-5 receptor a is syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                          BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                           á
                                                Query Match
Best Local S
Matches 20
                                                                                                                                                                                                     versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with IL-5 signal transduction, IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form
                                                                                                                                    Sequence 20 BP; 2 A; 5 C; 3 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example
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(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-SEP-2002
                                                                                                                                                                                       is an antisense oligonucleotide targetting human ILS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MANO/)
    2135 AAGACGGAGAGTAAACCAAT 2154
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20; Page 19; 77pp; English.
                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Karras JG,
                                                  Conservative
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                                                                        0.6%;
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                                                                                                Score
                                                                             Pred.
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                                                     Mismatches
                                                                          . No.
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1988 AAGAAATACATTGACGGCCA 2007

Matches Query Match Best Local

Similarity

0.6%;

Score 20; Pred. No.

DB 1;

Length 20; Indels

1.1e+02;

Conservative

<u>.</u>

Mismatches

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Gaps

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20

1.1e+02; DB 1;

Length 20; Indels

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Gaps

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RESULT 136

Sequence

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ABX04356/c
ABX043
XX
AC ABX043
AC ABX040
AC ABX040
AC ABX040
AC ABX04
RESULT 137
ABX04362/c
ID ABX043
XX
AC ABX043
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       length, which modulates interleukin (11)-5 signal transcribed. CC include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and CC a diagnostic kit for detecting the expression level of the membrane form CC versus soluble form of IL-5 receptor a. The antisense compound is useful CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, of in cells or tissues, for altering the ratio of the isoforms of mammalian CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC having a disease or condition associated with IL-5 signal transduction, CC IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
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Best Local Similarity
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(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                ABX04362;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABX04356 standard; DNA;
                                                                                                   ABX04362 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to an antisense compound of 8-30 nucleobases length, which modulates interleukin (IL)-5 signal transduction. Al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human Interleukin 5 antisense oligonucleotide ISIS 16087
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                                                                                                                                                                                                                                                                                                           CGGCCAAAAAGTAAGTTACA 2021
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 3 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 19;
                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                0.6%;
                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 C; 4 G; 9 T; 0 U;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
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13-JAN-2003 ABX04343;

(first

entry)

98;

antisense; interleukin 5;

IL-5; IL-5

receptor; antiasthmatic;

ABX04343 standard;

DNA;

20 ₽₽

0

Human Interleukin 5 antisense oligonucleotide ISIS 16074.

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RESULT 138
ABX04343/c
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(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                              versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 receptor a mammalian IL-5 receptor a latering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, for altering the ratio of the isoforms of mammalian latering a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, a diagnostic kit for detecting the expression level of the membrane from the membrane of the membrane for                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                               Sequence 20
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17-MAR-2000; 2000WO-US007318
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 20; Page 19; 77pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2002128216-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-JAN-2003
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                                                                                                                                                                         2269 TGCAGTGAGAATGAGGGCCA 2288
                                                                                                                      20 · TGCAGTGAGAATGAGGGCCA 1
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                                                                                                                                                                                                                                    20;
                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Karras JG,
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ressant; eosinophilic syndrome;
                                                                                                                                                                                                                                                                                                                                               BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                               Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          oligonucleotide
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                                                                                                                                                                                                                                                                                            DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modulating expression of ion of mammali--
                                                                                                                                                                                                                                                               .1e+02
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                                                                                                                                                                                                                                                                                      Length 20
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RESULT 139
ABXO4366/c
ID ABXO43
XX ABXO43
AC ABXO43
XX III JJAN
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Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of II-5 receptor a. The antisense compound is useful for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of the isoforms of mammalian II-5 receptor a for altering the ratio of the isoforms of mammalian II-5 receptor a for altering the ratio of the isoforms of mammalian III-5 receptor a mammalian cells or tissues, treating a mammalian having a disease or condition associated with II-5 signal transduction, lII-5 expression or II-5 receptor a expression, where the disease or condition associated with II-5 signal transduction,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                        ABX04366 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 20; Page 19; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-039602/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-MAR-2001; 2001US-00800629.
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                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                     ABX04366;
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                                                                                                                                                                                                   Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAR-1999; 99US-00280799.
17-MAR-2000; 2000WO-US007318.
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                                                                                                               mmunosuppressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           889
                                                                                                                                                                                                   Interleukin
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KARRAS J G.
MCKAY R.
                                                                                                                                    ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCAATGAGGTAATTTTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCAATGAGGTAATTTTCTT 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP; 8 A;
                                                                                                                                                                                                                                                         (first
                                                                                                                                                                                                   5 antisense
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                                                                                                               eosinophilic syndrome;
                                                                                                                                                                                                                                                                                                                                                                           DNA;
                                                                                                                                                                                                                                                         entry)
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           707
                                                                                                                                                                                                oligonucleotide ISIS 16097.
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RESULT 140 ABX04340/c ID ABX043

ABX04340 standard; DNA;

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ВP

13-JAN-2003

(first entry)

ABX04340

Human

Interleukin

v

antisense oligonucleotide ISIS 16071.

S

523

CCAAAGGCAAACGCAGAACG 542 CCAAAGGCAAACGCAGAACG

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20

Human; 88; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; immunosuppressant; eosinophilic syndrome; asthma.

Homo

US2002128216-A1

12-SEP-2002

07-MAR-2001; 2001US-00800629

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length, which modulates interleukin (II)-5 signal transduction. Also conclude are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 receptor a, in cells or tissues, for altering the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian Claving a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
Matches
                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
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(KARR/)
(MCKA/)
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                                                                  Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                               Example 20; Page 19; 77pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAR-1999;
17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                 The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                   transduction.
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                Local Similarity
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20;
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) KARRAS J G.
) MCKAY R.
) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Karras JG,
                                                                  BP; 0 A; 5 C; 6 G; 9 T; 0 U; 0 Other;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-00280799
2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                                 relates to
                 100.0%;
                                  0.6%;
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                                                                                                                                                                                                                                                                                                                                                               an antisense compound of 8-30 nucleobases
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0,
                Score 20;
Pred. No.
 Mismatches
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                                  DB 1;
                 1.1e+02;
٥,
                              Length 20
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Gaps
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RESULT 141
ABX04349/c
ID ABX043
XX ABX043
AC ABX043
XX Human
XX Human;
KW Human;
KW Human;
KW Immunc
XX Homo &
XX Ho
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Best Local S
Matches 20
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(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
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                                                                                        26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABX04349 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
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17-MAR-2000;
                                                                                                                                                                              07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                  US2002128216-A1.
                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; immunosuppressant; eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human Interleukin 5 antisense oligonucleotide ISIS 16080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-JAN-2003
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      (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
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20; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₿₽;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    77pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5 T; 0 U; 0 Other;
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thes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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RESULT 142
ABX04350/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Inength, which modulates interleukin (IL)-5 signal transduction. Also cinclude are a pharmaceutical composition comprising the antisense colligonucleotide and a pharmaceutically acceptable carrier or diluent, and call of a diagnostic kit for detecting the expression level of the membrane form correct colligions of the separate compound is useful for modulating IL-5 signal transduction, modulating expression of command of the membrane form concepts of the separate compound is useful concepts of the separate compound in the colls or tissues, for altering the expression of mammalian IL-5 receptor a, colls or tissues, for altering the ratio of the isoforms of mammalian colls or tissues, treating a mammalian colls or tissues, treating the transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                            (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                   07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human Interleukin 5 antisense oligonucleotide ISIS 16081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABX04350 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to an antisense compound of 8-30 nucleobases length, which modulates interleukin (IL)-5 signal transduction. Al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 20; Page 19; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MCKA/)
                 Dean NM
                                                                                                                                                                    26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                                                                                                             12-SEP-2002.
                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                              Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABX04350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-039602/03.
                                                                                                                                                                                                                                                                                                                        US2002128216-A1
                                                                                                                                                                                                                                                                                                                                                                                                        immunosuppressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1161 TTCCCAAAGAGCATCGTGTC 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MCKAY R.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCCCAAAGAGCATCGTGTC
                 Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                        eosinophilic syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mckay R,
                 Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     쁌
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                    Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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2003-039602/03.

Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal

Example

20; Page 19; 77pp;

English.

ح.

transduction

P. Bang

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RESULT 143
ABXO4365/c
ID ABXO43
XX ABXO43
XX ABXO43
XX Human
XX Human;
KW Immunc
XX Human;
KW Immunc
XX Human;
KW Immunc
XX Homo E
XX 12-SEI
XX 12-SEI
XX HOMAI
PF 07-MAI
XX (DEAN)
PA (MCNA)
PA (MCNA)
PA (MCNA)
PA (MANO)
XX Dean 1
XX PFI Ovel
PT Syndr
PT Syndr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to an antisense compound of 8-30 nucleobases in clerity, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a in antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 20
                                                                                                                                (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                     26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                                                                 07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                     13-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABX04365 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20
                                                                                                                                                                                                                                                             12-SEP-2002.
                                                                                                                                                                                                                                                                                      US2002128216-A1
                                                                                                                                                                                                                                                                                                                                               immunosuppressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABX04365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1407
                                                           2003-039602/03.
                                                                                       ₹
                                                                                                                                                                                                                                                                                                                                                                                         Interleukin 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                             88; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
suppressant; eosinophilic syndrome; asthma.
                                                                                                                                KARRAS J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                  MANOHARAN M
                                                                                                                                            DEAN N M.
KARRAS J G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCCTGGTCATATTAAAATG 1426
                                                                                      Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 7 A; 4 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                     (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                     entry)
                                                                                                                                                                                                                                                                                                                                                                                         antisense oligonucleotide ISIS 16096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.6%;
                                                                                      Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                    ₽,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 20;
Pred. No.
                                                                                    Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                      3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
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CC The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (IL)-5 signal transduction. Also CC include a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and CC a diagnostic kit for detecting the expression level of the membrane form CC versus soluble form of II-5 receptor a. The antisense compound is useful CC for modulating IL-5 signal transduction, modulating expression of CC mammalian II-5 or modulating the expression of mammalian II-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian CC in cells or tissues, for altering the ratio of the isoforms of mammalian CC in cells or tissues or condition associated with II-5 signal transduction, CC in-5 expression or II-5 receptor a expression, where the disease or CC condition include eosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding II-5 receptor a is also useful CC is an antisense oligonucleotide targetting human IIS
Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20; Page 19; 77pp; English
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Best Loc
Matches
                                        Query Match
          509 ATGCACTTTCTTTGCCAAAG
20
                           20;
                                   Similarity
                           Conservative
                                  0.6%;
                           0;
                                  Score 20;
Pred. No.
_
             528
                           Mismatches
                                         DB 1;
                                   1.1e+02;
                           0
                                         Length
                           Indels
                                         20;
                           0
                           Gaps
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0

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RESULT 144
ACF004469
ID ACF0044
XX ACF0044
XX ACF0044
XX Wacled
DT 04-DEC
XX Wacled
KW Gene t
KW neuroj
XX WO200:
XX PD 24-JUJ
XX PD 20-JAJ
XX CULBR
XX CULBR
XX PFI Stord
XX WPI;
XX Quant
PFI medic
PFI reage
XX Discl
PFI CC The p
CC The p
CC tube
CC tube
CC tube
                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid level determination; PCR; primer; probe; DNA quantification; gene therapy; immunosuppressive; anti-HIV; antiarthritic; neuroprotective; cytostatic; antiallergic; ss.
                                                                                                                                                                                                                                                                                                                  WO2003060119-A2
                                                                                                                                                                                                                                                                                                                                            Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                      Real time PCR targeting IL-5 PCR primer F83.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACF04469 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
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24-JUL-2003

18-JAN-2002; 2002EP-00447009 20-JAN-2003; 2003WO-EP000493

Stordeur P, (ULBR) UNIV LIBRE BRUXELLES Goldman 3

2003-598531/56.

Quantifying in vivo RNA from a biological sample for producing a medicament for treating immune related disease by determining in vlevels of transcripts using nucleic acid/reverse transcription-PCR of transcripts using t mix in an automated nucleic setup. Vivo

42; 83pp; English

The present invention relates to a method of quantifying in vivo RNA fix a biological sample. This involves collecting the biological sample in tube comprising a compound inhibiting RNA degradation and/or gene induction, forming a precipitate comprising nucleic acids, separating t separating the from þ

Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal

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RESULT 145
ABZ95282/C
ID ABZ952
XX ABZ952
XX ABZ952
XX ABZ952
XX ABZ952
XX HOMO
IT-OCT
XX Human;
XW Human;
XW Antiin
XW Antiin
XW Antiin
XW Adenos
XX Homo s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99999999999999998%
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-OCT-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-APR-2001; 2001US-0286137P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200285308-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (EPIG-)
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20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EPIGENESIS
                                                                                                                                                                                                                                                                                                                                                                                                                      Li Y, Sa
, Tang L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCTGCCTACGTGTATGCCA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCTGCCTACGTGTATGCCA 610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense fragment no.1146.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            larity 100.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4 A;
                                                                                                                                                                                                                                                                                                                                                                                                                            Sandrasagra A,
L, Shahabuddin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ç
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ഗ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>.</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                            Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.1e+02;
hes 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pabalan J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
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The invention relates to a novel pharmaceutical composition, which has first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or

This invention describes a nucomprising oligonucleotides, bronchoconstriction, respira

a novel composition (a) a first active agent, des, effective for alleviating piratory tract inflammation, allergies and

Claim

15;

SEQ ID NO 10524; 763pp; English

Disclosure; SEQ

IJ

NO 10524; 872pp;

English

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

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RESULT 146
ABD19256/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cc masal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention cc has antiinflammatory, antiallergic, antiasthmatic, hypotensive, cc immunosuppressive, and cytostatic activity. The composition may have a cure in antisense gene therapy. The composition is useful for treating or greventing a respiratory, lung or malignant disease or condition, also cc for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction. Clung inflammation, lung allergies, or a respiratory disease or condition. Clung inflammation, but was obtained in electronic format directly from WIPO at fifth, wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 20
                                                                                                                                                                                                    Nyce JW,
Miller S
                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysems; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ds.
                                                                                      Pharmaceutical composition for treating asthma, has antisense oligonuclectide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.
                                                                                                                                                                                                                                                                                                              23-APR-2002; 2002WO-US013143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human IL5 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABD19256;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABD19256 standard;
                                                                                                                                                                      WPI; 2003-093058/08
                                                                                                                                                                                                                                                                               24-APR-2001; 2001US-0286036P
                                                                                                                                                                                                                                                                                                                                                                              WO200285309-A2
                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-JUL-2004
                                                                                                                                                                                                                                                   (EPIG-)
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                                                                                                                                                                                                                                                 EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AACAAAAGGACAGAGAGACA 1
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Tang
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   fragment 1146.
                                                                                                                                                                                                  Sandrasagra A,
L, Shahabuddin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; 5 C; 3 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.6%;
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Pred. No.
                                                                                                                                                                                               י Katz .
יו S;
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New antisense compound modulating useful in promoting apoptosis and

interleukin-5 signal transduction, in treating eosinophilic syndrome

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WPI;

2004-479669/45.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cc reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, cc surfactant depletion or hyposecretion, when administered to a mammal. The coligonucleotides are derived from a gene encoding or regulating cc expression of a target polypeptide associated with lung airway or lung cysfunction or cancer and can be anti-sense to the corresponding mRNA. Cc device, in separate containers, (b) the oligonucleotides, (c) contributions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, contributed or comprises of the composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The culture the amount of target polypeptide present in the lungs. The culture adisease or condition such as pulmonary vasoconstriction, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, respiratory conditions, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. Cc thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system ce., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 147
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                       Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20
                                                             (KARR/)
(MCKA/)
                                                                                                                                            26-MAR-1999;
17-MAR-2000;
                                                                                                                                                                                            06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                             US2004121376-A1
                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                        eosinophilic syndrome; asthma; antiasthmatic; cytostatic
                                                                                                                                                                                                                                                                                                                                                                                                         Human interleukin-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADR12029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADR12029 standard;
               Dean NM
                                                                                                                             07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                          23-SEP-2004
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                                                             ) DEAN N M.
) KARRAS J G.
) MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
20; Conserv
                                            MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AACAAAGGACAGAGAGACA
             Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                           99US-00280799.
2000WO-US007318.
2001US-00800629.
                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                        (IL-5) DNA antisense oligonucleotide #13
                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5 C; 3
               Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    G; 12 T; 0 U; 0 Other;
             70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      red. No. 1.1
Mismatches
             Manoharan
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. 1.1e+02;
hes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
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CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense coligonucleotide comprises at least one modified internucleoside linkage, ci.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CI-5 signal transduction or II-5 or II-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IL-5) signal transduction. The antisense compound that modulates interleukin oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense
Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20;
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BP; 6 A;
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2 C; 7 G; 5 T; 0 U; 0 Other;
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                                                                                                                      Query Match
Best Local Similarity
Matches 20; Conser
                                    ADR12040 standard;
23-SEP-2004
                                                                                  20 CCTCATTTAGCACCAACTGT 1
                                                                                                    CCTCATTTAGCACCAACTGT 1892
                                                                                                                       Conservative
(first
                                     DNA;
entry)
                                                                                                                               0.6%;
                                     20
                                     ВP
                                                                                                                       0; Mismatches
                                                                                                                                Score 20;
Pred. No.
                                                                                                                                DB 1; 1
1.1e+02
                                                                                                                       0
                                                                                                                                         Length
                                                                                                                        Indels
                                                                                                                       0
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RESULT 148
ADR12040/C
ID ADR120
XX ADR120
XX ADR120
XX Human
XX Human;
KW IL-5 E
KW 5-meth
KW 5-meth
KW 050inc
XX US2004
                                                                                                                                                                 26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
(DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5-methylcytosine;
eosinophilic syndr
                                                                                                                                                                                                                                                                                                                              06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human interleukin-5 (IL-5) DNA antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                               24-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2004121376-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   receptor a; phosphorothioate;
thylcytosine; IL-5 signal tran:
DEAN N M.
KARRAS J G.
MCKAY R.
                                                                                                                                                                 99US-00280799
2000WO-US007318
2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sine; IL-5 signal syndrome; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transduction; apoptosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2'-O-methoxyethyl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sugar moiety;
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ADRIZOT 149
ADRIZO19/c
ID ADRIZO
XX ADRIZO
XX ADRIZO
XX Human
XX Human;
KW IL-5 r
KW 5-meth
KW eosino
XX Homo 8
XX US2004
XX HOMO 8
XX HOMO 10
XX 
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Best Local S
Matches 20
       26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'.O-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylycytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with II-5 signal transduction or II-5 or II-5 receptor a expression, or a disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5 receptor a expression, or II-5 receptor a is modulated, the ratio of II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a series of II-5 receptor a serie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -5 (II-5) signal transduction. The antisense compound is an a cligonucleotide targeted to a nucleic acid molecule encoding II-5 or II-5 receptor a. where the anticon-
                                                                                                                                                                                                                                                                                                                                                                                                                                                          IL-5 receptor a; phosphorothicate; 2'-O-methoxyethyl s 5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human interleukin-5 (IL-5) DNA antisense oligonucleotide #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADR12019 standard; DNA;
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                                                                                                                                            06-OCT-2003;
                                                                                                                                                                                                                    24-JUN-2004
                                                                                                                                                                                                                                                                                        US2004121376-A1
                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                             eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-SEP-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to an antisense compound that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 20; SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-479669/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modulated. The antisense compounds, methods and compositions are eful in promoting apoptosis and in treating eosinophilic syndrome and thma. This sequence represents a human IL-5 DNA antisense igonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2352 CATACTGACACTTTGCCAGA 2371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  interleukin-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATACTGACACTTTGCCAGA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
          2000WO-US007318
2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                             syndrome; asthma;
                                                                                                                                               2003US-00679532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                           9905-00280799.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'n,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IL-5; 88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ₽,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Manoharan
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.1e+02;
hes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sugar moiety;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antisense
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CC IL-5 or IL-5 receptor a, where the antisense compound modulates the CC expression of mammalian IL-5 or IL-5 receptor a. The antisense coligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or cissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is CC matered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 signal transduction. IL-5 or IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a is modulated. The antisense compounds, methods and compositions are coligonal solide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                     oligonucleotide targeted to a nucleic acid molecule encoding IL-5 or IL-5 receptor a, where the antisense compound modula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense compound modulating useful in promoting apoptosis and
                                 oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KARRAS J
MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ
                                   sequence represents ide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ω.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             an antisense compound that modulates interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        interleukin-5 signal transduction, in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                             antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                             compound is an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          syndrome or
                                                                                                                                                                                                                                                                                                                                                                                                                                             antisense
                                                                                                                                                                                                                                                                                                                                                                                                                         a mammalian
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Sequence 20 B₽; 4. P, 6 C; 4 G; 6 T; 0 U; 0 Other;

ঠ Query Match Best Local S Matches 20 540 ACGTTTCAGAGCCATGAGGA 559 l Similarity 20; Conserv 0.6%; Silarity 100.0%; Conservative 0; Score 20; DB 1; Pred. No. 1.1e+(Mismatches 1.1e+02; 0; Length 20; Indels <u>.</u> Gaps 0

RESULT 150 2025/c ADR12025 standard; DNA; ВP

문

20

ACGITICAGAGCCATGAGGA 1

Human interleukin-5 (IL-5) DNA antisense oligonucleotide (first entry)

IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl s
5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic Human, interleukin-5; IL-5; 88; syndrome; asthma; antiasthmatic; antisense oligonucleotide; 2'-O-methoxyethyl sugar moiety;

Homo sapiens

JS2004121376-A1

06-OCT-2003; 2003US-00679532

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RESULT 151
ADR12033/c
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The invention relates to an antisense compound that modulates interleukin CC -5 (IL-5) signal transduction. The antisense compound is an antisense CC oligonuclectide targeted to a nucleic acid molecule encoding a mammalian CC IL-5 or IL-5 receptor a, where the antisense compound modulates the CC expression of mammalian IL-5 or IL-5 receptor a. The antisense CC i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methoxyethyl sugar moiety, and at CC its sues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian IL-5 receptor a in mammalian cells or CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises antisense compound so that IL-5 signal transduction, IL-5 or IL-5 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and asthma. This sequence represents a human IL-5 DNA antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dean
                                                                                                                                                                                                                                                                                                                                   ADR12033 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound modulating interleukin-5 signal transduction, useful in promoting apoptosis and in treating eosinophilic syndrome or
US2004121376-A1
                                                                                                                                                                                                Human interleukin-5 (IL-5) DNA antisense oligonucleotide #17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-479669/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MCKA/)
                                          Homo sapiens
                                                                                                       II-5 receptor a; phosphorothioate; 2'-0-methoxyethyl s
5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                     Human; interleukin-5; IL-5; 88;
                                                                                                                                                                                                                                               23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DEAN/)
(KARR/)
                                                                                      eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              964 TGATGGCATGAATAAGTAAA 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
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KARRAS J
MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGATGGCATGAATAAGTAAA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 5 A; 5 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 47; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-00280799.
2000WO-US007318.
2001US-00800629.
                                                                                                                                                                                                                                          (first entry)
                                                                                      syndrome; asthma; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              G.
G.
                                                                                                                                                                                                                                                                                                                                   DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.6%; Score 20;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mckay R,
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                                                                                                                                                                                                                                                                                                                                     ΒP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                     antisense oligonucleotide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                              sugar moiety;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense CC oligonucleotide comprises at least one modified internucleoside linkage, CC i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio CC of the isoforms of mammalian II-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC II-5 signal transduction or II-5 or II-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an CC antisense compounds that II-5 signal transduction, II-5 or II-5 CC receptor a expression, or II-5 receptor a is modulated, the ratio of II-5 modulated. The antisense compounds, methods and compositions are CC useful in promoting apoptosis and in treating eosinophilic syndrome and CC asthma. This sequence represents a human II-5 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                         oligonucleotide targeted to a nucleic acid molecule encoding a mammal IL-5 or IL-5 receptor a. where the artisoner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-JUN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 20; SEQ ID NO 55; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-479669/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dean
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DEAN/)
(KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ) DEAN N M.
) KARRAS J G.
) MCKAY R.
) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-00280799
2000WO-US007318
2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                   an antisense compound that modulates interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          interleukin-5 signal transduction, in treating eosinophilic syndrome or
                                                                                                                                                                                                                                                                                                                                                                                                                a mammalian
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Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

S 믕 Matches Query Match Best Local (2002 CGGCCAAAAAGTAAGTTACA 2021 20; 20 Similarity CGGCCAAAAAGTAAGTTACA 1 Conservative 0.6%; 0, Score 20; DB 1; L Pred. No. 1.1e+02; Mismatches 0 Length 20 Indels 0 Gaps 0

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RESULT 152
ADR12034/C
ID ADR120
XX ADR120
XX ADR120
XX ADR120
XX ADR120
XX Human
XX Human;
KW IL-5 I
XW 5-meth
XW 5-meth
XW Gosinc
             Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-0-methoxyethyl sugar moiety; 5-methylytosine; IL-5 signal transduction; apoptosis;
                                                                                                                23-SEP-2004
                                                                                                                                                                                ADR12034 standard; DNA; 20
                                                                                                                                                 ADR12034;
                                                                                  interleukin-5
 syndrome;
                                                                                                                (first entry)
                                                                                  (IL-5)
                                                                                DNA antisense oligonucleotide
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RESULT 153
ADR12021/c
ID ADR12(
XX
AC ADR12(
XX
DT 23-SE
XX
DE Humar
XX
X
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                                                                                                                                                                                                                                                                                                                                                                     CC -5 (II-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense compound modulates the CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with CII-5 signal transduction or II-5 or II-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisease compound so that II-5 signal transduction, II-5 or II-5 or II-5 or II-5 receptor a expression of internation of membrane II-5 receptor a is modulated. The antisense compounds, methods and compositions are CC is modulated. The antisense compounds, methods and compositions are CC oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                 Human interleukin-5
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                                                                              23-SEP-2004
                                                                                                                                          ADR12021 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 8 A; 5 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 20; SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound useful in promoting apo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-OCT-2003; 2003US-00679532
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-479669/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MANO/)
                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                    2051 GCTGTGCCTATTTCTATGGA 2070
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MCKAY R.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                      GCTGTGCCTATTTCTATGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Karras JG,
                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-00280799.
2000WO-US007318.
2001US-00800629.
                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             und modulating apoptosis and
                                                 (IL-5)
                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      to an antisense compound that modulates interleukin sduction. The antisense compound is an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     56;
                                                                                                                                                                                                                                                                                                              0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 77pp; English
                                                 DNA
                                                                                                                                                                                                                                                                                ۰,
                                                                                                                                                                                                                                                                                              Score 20; DB 1; Length 20; Pred. No. 1.1e+02;
                                                 antisense
                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             interleukin-5 signal transduction, in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                1.1e+02;
thes 0;
                                                oligonucleotide
                                                                                                                                                                                                                                                                                 Indels
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RESULT 154
ADR12027/c
ID ADR120
XX
AC ADR120
XX

ADR12027 standard;

DNA;

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857 TGAATGCTGGTGTGCTGTAA 876

Matches Query Match

20;

Conservative

0

Mismatches

0

Gaps

Local

Similarity

0.6%;

Score 20; ; Pred. No.

DB 1; 1.le+02;

Length 20; Indels

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The invention relates to an antisense compound that modulates interleukin c5 (II-5) signal transduction. The antisense compound is an antisense coligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense compound modulates the CC oligonucleotide comprises at least one modified internucleoside linkage, c1.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a insoforms is altered. Treating a mammal having a disease or condition sesociated with CI is signal transduction or II-5 or II-5 receptor a expression, or a catisense compound so that II-5 signal transduction, II-5 or II-5 o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense compound modulating useful in promoting apoptosis and
Sequence 20 BP; 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 20; SEQ ID NO 43; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-479669/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dean NM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-OCT-2003; 2003US-00679532
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 interleukin-5; IL-5; 88; antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Karras JG,
A; 7 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mckay R,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               interleukin-5 signal transduction, in treating eosinophilic syndrome or
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Human interleukin-5

(IL-5)

DNA

antisense oligonucleotide

23-SEP-2004

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                                                                                                                                                                                      The invention relates to an antisense compound that modulates interleukin CC -5 (II-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nuclecic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense compound modulates the CC oligonucleotide comprises at least one modified internucleoside linkage, CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio CC of the isoforms of mammalian II-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense CC altered. Treating a mammal having a disease or condition associated with CI-5 signal transduction or II-5 or II-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises CC antisense compound so that II-5 signal transduction, II-5 or II-5 creceptor a expression of an antisense compound so that II-5 receptor a transduction of II-5 creceptor a spread of II-5 or II-5 receptor a spread of II-5 or II-5 creceptor a spread of II-5 or II-5 receptor a spread of II-5 receptor a 
                                                                            Matches
                                                                                               Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugs 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound modulating interleukin-5 signal transduction, useful in promoting apoptosis and in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
07-MAR-2001; 2001US-00800629
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-JUN-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 20;
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20
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MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEAN N
                                                                                                                                                         20
                          TGCCTGGTCATATTAAAATG 1426
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                                                                                                                                                         B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 49; 77pp; English
                                                                            Conservative
                                                                                                                                                         7
                                                                                                                                                         P
                                                                                             0.6%;
                                                                                                                                                         4 C; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IL-5; 88;
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                                                                          <u>,,</u>
                                                                                                                                                         <u>ი</u>
                                                                                               Score 20; DB 1;
Pred. No. 1.1e+0
                                                                                                                                                         σ
                                                                            Mismatches
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                                                                                               1.1e+02
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                                                                                                                                                         Other;
                                                                                                               Length 20
                                                                              Indels
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RESULT 155 ADR12031/c

밁 5

20

1932 GTCAAACTGTGCAAGGGGGT 1951

Query Match Best Local S Matches 20

Similarity

0.6%;

Conservative

0, Score Pred.

Mismatches

<u>,,</u>

Gaps

0,

. 20;

1.1e+02; DB 1;

Length 20 Indels

Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

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i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a disease or condition characterised by a reduction in apoptosis comprises administering to the mammal at therapeutic or prophylactic amount of an antisense compound so that IL-5 signal transduction, IL-5 or IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dean
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -5 (IL-5) signal transduction. The antisense compound is an eligonucleotide targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an antisense compound that modulates interleukin -5 (II-5) signal transduction. The antisense compound is an antisense
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-OCT-2003; 2003US-00679532.
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                                              oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADR12031 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MANO/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ) DEAN N M
) KARRAS J
) MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 53; 77pp; English.
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2001US-00800629
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            G.
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                                                of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mckay R,
                                                invention.
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RESULT 156
ADR12043/C
ID ADR120
AC A
                                                                                                                                                                                                 CC oligonuclectide targeted to a nucleic acid molecule encoding a mammalian CC IL-5 or IL-5 receptor a, where the antisense compound modulates the CC expression of mammalian IL-5 or IL-5 receptor a. The antisense CC oligonuclectide comprises at least one modified internucleoside linkage, CC i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues with an antisense CC compound so that the ratio of the mammalian IL-5 receptor a in seforms is altered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an CC antisense compound so that IL-5 receptor a is modulated, the ratio of IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered or prophylactic account of an infigence of the prophylactic amount of an infigence of the prophylactic amount of an infigence of the prophylactic amount of an infigence of the prophylactic account of the mammal and the prophylactic amount of an infigence of the prophylactic and the prophylactic amount of an infigence of the prophylactic amount of an infigence of the prophylactic account of the prophylactic amount of an infigence of the prophylactic amount of the prophylactic amou
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17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound modulating useful in promoting apoptosis and
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5-methylcytosine; IL-5 signal transduction; apoptosis;
       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 20;
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(KARR/)
(MCKA/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-SEP-2004
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                                                                                                      modulated. The antisense compounds, methods and compositions are eful in promoting apoptosis and in treating eosinophilic syndrome and thma. This sequence represents a human IL-5 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ) DEAN N M.
) KARRAS J G.
) MCKAY R.
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          20
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          BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-00280799
2000WO-US007318
2001US-00800629
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                                                                            the invention.
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       Ç
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       G; 9 T;
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       Other,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Or.
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Query Match Best Local S Matches 20

Similarity 20; Conserv

0.6%; Score 20; DB llarity 100.0%; Pred. No. 1. Conservative 0; Mismatches

1.1e+02; thes 0; DB 1;

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Gaps

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Other

Length 20; Indels

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RESULT 157
ADR12039/c
ID ADR120
XX ADR120
XX ADR120
XX ADR120
XX IL-5 r
XX Human;
XW Human;
XW Human;
XW US2004
XX 26-MAH
PR 07-MAH
PR 17-MAH
PR 17-MAH
PR 17-MAH
PR 07-MAH
PR 17-MAH
PR 1
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                                                                                                                                                                               CC expression of mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the compression of mammalian IL-5 or IL-5 receptor. The antisense coligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is compound so that IL-5 or IL-5 receptor a expression, or a disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an creeptor a expression, or the sufficient or IL-5 signal transduction, IL-5 or IL-5 compound so that IL-5 signal transduction, IL-5 or IL-5 compound so that IL-5 signal transduction, IL-5 or IL-5 compound so that IL-5 signal transduction, IL-5 or IL-5 compound so that IL-5 signal transduction, IL-5 or IL-5 compound so that IL-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAR-1999;
17-MAR-2000;
                                                                                          is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome asthma. This sequence represents a human IL-5 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -5 (IL-5) signal transduction. The antisense compound is an obligonucleotide targeted to a nucleic acid molecule encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound modulating interleukin-5 signal transduction, useful in promoting apoptosis and in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-OCT-2003; 2003US-00679532
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-479669/45
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human interleukin-5 (IL-5) DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to an antisense compound that modulates interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-00280799.
2000WO-US007318.
2001US-00800629.
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lne; IL-5 signal tran
                                                                    of the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61; 77pp; English
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Query Match Best Local S Matches 20

Similarity

0.6%;

Score 20; Pred. No.

DB 1; L, 1.1e+02;

Length 20

0;

Gaps

0

Conservative

0,

Mismatches

0;

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RESULT 158
ADR12042/c
ID 123-SEP
XX Human;
XX Human;
XX Human;
XX Human;
XX Human;
XX Human;
XX E-meth
XX US2004
XX 26-MAI
PP 06-OCT
XX 26-MAI
PR 17-MAI
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XX (MCAR,
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i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or CC tissues comporises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC disease or condition or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an CC receptor a expression, or IL-5 signal transduction, IL-5 or IL-5 creeptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                              -5 (IL-5) signal transduction. The antisense compound that modulates oligonucleotide targeted to a nucleic acid molecule encoding a IL-5 or IL-5 receptor a, where the antisense compound
                                                                                                                                                                                                                                                                                                                                       IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; interleukin-5; IL-5; 88; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'.O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antiBense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example
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MCKAY R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID
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2000WO-US007318.
2001US-00800629.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  77pp; English
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CC -5 (II-5) signal transduction. The antisense compound is an antisense coligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense compound could be antisense of i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at CC iesat one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or CC issues comprises contacting the cells or tissues with an antisense cC compound so that the ratio of the mammalian II-5 receptor a isoforms is CC il-5 signal transduction or II-5 or II-5 receptor a expression, or a CC issues or condition characterised by a reduction in apoptousis comprises comprises compound so that the ratio of the mammalian II-5 receptor a expression, or a CC altered. Treating a mammal having a disease or condition associated with CC II-5 signal transduction or II-5 or II-5 receptor a expression, or a CC antisense compound so that II-5 signal transduction, II-5 or II-5 o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DEAN/)
(KARR/)
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5-methylcytosine; IL-5 signal transduction; apoptosis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-OCT-2003; 2003US-00679532
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MCKAY R.
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optosis and
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receptor a expression, or IL-5 receptor a is modulated, the receptor a isoforms is altered, or expression of membrane II is modulated. The antisense compounds, methods and compositi

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The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at least one modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with
                                                                                                                                                                                                                                                                                                                                                                                                    26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome asthma. This sequence represents a human IL-5 DNA antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                      New antisense compound modulating useful in promoting apoptosis and
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KARRAS J G.
MCKAY R.
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cytosine; IL-5 signal transduction; apoptosis;
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The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio

New antisense compound useful in promoting

und modulating apoptosis and

interleukin-5 signal transduction, in treating eosinophilic syndrome

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RESULT 161
ADR12037/c
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Matches
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Best Local (
                                                                                                                                                                                                                                                                           26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 signal transduction, IL-5 or IL-5 receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating easinophilic syndrome and asthma. This sequence represents a human IL-5 DNA antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                             Human; interleukin-5; IL-5; ss; antisense oligonuclootide; IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADR12037
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                                                                                                                                                                                                Dean
                                                                                                                                                                                                                                                                                                                                             24-JUN-2004.
                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                          WPI; 2004-479669/45
                                                                                                                                                                                                                                                                                                                      06-OCT-2003; 2003US-00679532.
                                                                                                                                                                                                                                                                                                                                                                   US2004121376-A1
                                                                                                                                                                                                                      (MANO/)
                                                                                                                                                                                                                                                       (DEAN/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   interleukin-5 (IL-5) DNA antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20;
                                                                                                                                                                                                                    DEAN N M.
KARRAS J G.
MCKAY R.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCAATGAGGTAATTTTCTT 707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                               Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP;
                                                                                                                                                                                                                                                                          99US-00280799.
2000WO-US007318.
2001US-00800629.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; 4 C; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entry)
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                                                                                                                                                                                                Mckay
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 G; 5 T;
                                                                                                                                                                                               70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ore 20; DB
pred. No. 1.1
Mismatches
                                                                                                                                                                                                Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Le
1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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RESULT 162
ADR12044/c
ID ADR12044 standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                    (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                              26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisease compound so that IL-5 signal transduction, IL-5 or IL-5 receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a sound of the control of IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome asthma. This sequence represents a human IL-5 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; interleukin-5; IL-5; 88; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'.O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                              New antisense compound useful in promoting apo
                                                                                                                                                                                                                                                                                                                                                                         06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                                                                                                                                                                   US2004121376-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human interleukin-5 (IL-5) DNA antisense oligonucleotide #28
                                                                                      Example
                                                                                                                                                                                                                                                                                                                                                                                                       24-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2186 AATGAACACCGAGTGGATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATGAACACCGAGTGGATAA 1
                                                                                                                                                                                                        Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 3 A; 5 C; 3 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.6%;
llarity 100.0%;
Conservative
                                                                                      OBS
                                                                                                                                                                                                                                                                                                               99US-00280799.
2000WO-US007318.
2001US-00800629.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of mammalian IL-5 receptor a in mammalian
                                                                                      ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                                                                                                                apoptosis
                                                                                      66;
                                                                                                                                                                                                         Mckay
                                                                                                                                modulating
optosis and
                                                                                  77pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 20;
Pred. No.
                                                                                    English
                                                                                                                                                                                                         Manoharan
                                                                                                                             interleukin-5 signal transduction,
in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Le
1.1e+02;
                                                                                                                                                                                                         Σ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20
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The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the

of mammalian IL-5 or IL-5

The invention relates to an antisense compound that modulates interleukin

Example

20; SEQ

ID NO

; 69

77pp; English.

New antisense compound modulating useful in promoting apoptosis and

interleukin-5 signal transduction, in treating eosinophilic syndrome

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RESULT 163
ADR12047/C
ID ADR120
XX ADR120
XX ADR120
XX BY
AC ADR120
XX BY
AC ADR120
XX BY
XX Human;
XX Human;
XX Human;
XX US2004
XX C5-MAH
PF 06-OCT
XX 24-JUN
XX 26-MAH
PR 17-MAR
PR 17-
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2"-0-methoxyethyl sugar 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             asthma. This sequence represents oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oligonucleotide comprises at least one modified internucleoside linkage,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAR-1999;
17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2004121376-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-SEP-2004 (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADR12047 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-OCT-2003; 2003US-00679532.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADR12047;
                                                                                                                                                                                                                                                                                     WPI; 2004-479669/45.
                                                                                                                                                                                                                                                                                                                                                           Dean NM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 688 GCCAATGAGGTAATTTTCTT 707
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                                                                                                                                                                                                                                                                                                                                                                                                                              ) DEAN N M.
) KARRAS J G.
) MCKAY R.
) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                           Karras JG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-00280799.
2000WO-US007318.
2001US-00800629.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (IL-5) DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entry)
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                                                                                                                                                                                                                                                                                                                                                           Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense oligonucleotide #31
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                                                                                                                                                                                                                                                                                                                                                           Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
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Example

ID NO 70; 77pp; English.

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RESULT 164
ADR12048/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     coligonucleocide targeted to a nucleic acid molecule encoding a mammalian III-5 or II-5 receptor a, where the antisense compound modulates the expression of mammalian III-5 or II-5 receptor a. The antisense compound modulates the expression of mammalian II-5 or II-5 receptor a. The antisense oligonucleocide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with II-5 signal transduction, or a disease or condition characterised by a reduction in apoptosis comprises antisense compound so that II-5 signal transduction. II-5 or II-5 acceptor a expression, or a notisense compound so that II-5 signal transduction, II-5 or II-5 is modulated, the ratio of II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a spression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                26-MAR-1999; 99US-00280799.
17-MAR-2000; 2000WO-US007318.
07-MAR-2001; 2001US-00800629.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-0-methoxyethyl sugar 5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         is modulated. The antisense compounds, methods and compositions are seful in promoting apoptosis and in treating eosinophilic syndrome and asthma. This sequence represents a human IL-5 DNA antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADR12048 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                              Dean NM,
                                                                                                                                               (MCKA/)
                                                                                                                                                                                                                                                                                  06-OCT-2003; 2003US-00679532.
                                                                                                                                                                                                                                                                                                                   24-JUN-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    interleukin-5 (IL-5) DNA antisense oligonucleotide #32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                            DEAN N M.
KARRAS J G.
MCKAY R.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTCATTTAGCACCAACTGT 1
                                                                                            Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 6 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    sine; IL-5 signal transduction; syndrome; asthma; antiasthmatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.6%;
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                                                                                            Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 20;
Pred. No.
                                                                                              Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
. 1.1e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>.</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bugar moiety;
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New antisense compound modulating useful in promoting apoptosis and asthma.

interleukin-5 signal transduction, in treating eosinophilic syndrome

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treating

WPI; 2004-479669/45

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RESULT 165
ADR12017/c
ID ADR120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                           (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                             26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage,
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WPI; 2004-479669/45
                                                                                                                                                                                                                                                                                                              06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                                                                                             24-JUN-2004.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligonucleotide
                                               Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                            US2004121376-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human interleukin-5 (IL-5) DNA antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADR12017 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002 CGGCCAAAAAGTAAGTTACA 2021
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                                            Karras JG,
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                                                                                                                                                                                                                2000WO-US007318
2001US-00800629
                                                                                                                                                                                                                                                               99US-00280799
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                                               Mckay
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                 Manoharan
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New antisense compound modulating useful in promoting apoptosis and

interleukin-5 signal transduction, in treating eosinophilic syndrome or

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RESULT 166
ADR12024/c
ID ADR120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CC i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one condified sugar moiety, i.e. a 2'.O-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises CC administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 receptor a receptor a expression, or IL-5 creceptor a expression, or IL-5 creceptor a expression, or IL-5 creceptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a is modulated. The antisense compounds, methods and compositions are CC useful in promoting apoptosis and in treating eosinophilic syndrome and CC oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 20
                                                                                                                                                26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IL-5 receptor a; phosphorothioate; 2'.O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -5 (IL-5) signal transduction. The antisense compound is an antisense
oligonucleotide targeted to a nucleic acid molecule encoding a mammal
IL-5 or IL-5 receptor a, where the antisense compound modulates the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       asthma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothicate; 2'-0-mark-correction of the correction of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human interleukin-5 (IL-5) DNA antisense oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 20;
(DEAN/)
(KARR/)
(MCKA/)
(MANO/)
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                                                                                                                                                                                                                                                               06-OCT-2003; 2003US-00679532
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MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGCACTTTCTTTGCCAAAG 528
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                             99US-00280799
2000WO-US007318
2001US-00800629
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1.1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #8
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-5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'.O-methoxyethyl sugar moiety, and at least one modified sugar moiety, i.e. a 2'.Fo-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with the ratio of the mammalian IL-5 receptor a service with a mammalian or a service with a service of the service with a service of the service with a service of the service or condition associated with the ratio of the service or condition associated with the service of the service or condition associated with the service of the service of the service or condition associated with the service of the service or condition associated with the service of the service or condition associated with the service of the service or condition associated with the service or condition associa
                                                               IL-5 signal transduction or IL-5 or II-5 receptor a expression, or a disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 signal transduction, IL-5 or IL-5 receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a semodulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and asthma. This sequence represents a human IL-5 DNA antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID
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밁 S Query Match Best Local S Matches 20 928 ACATAAAAATGTAAGTTAAA 947 20 Similarity ACATAAAAATGTAAGTTAAA 1 Conservative 100.0%; F 0.6%; Score 20; DB; Pred. No. 1.1
0; Mismatches DB 1; 1.1e+02; 0 Length 20; Indels ٥. Gaps 0

Sequence 20

BÞ; 5

A; 2 C; 1 G; 12

T; 0

U; 0

Other

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RESULT 167
ADR12026;
                 ADR12026 standard;
                 DNA;
                 20
                 ВP
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Human interleukin-5 (IL-5) DNA antisense oligonucleotide #10 23-SEP-2004 (first entry)

26-MAR-1999; 17-MAR-2000; 07-MAR-2001; Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothicate; 2'-0-methoxyethyl sugar molety; 5-methylcycosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cvtostatic 06-OCT-2003; 24-JUN-2004. US2004121376-A1 sapiens. 99US-00280799. 2000WO-US007318. 2001US-00800629. 2003US-00679532.

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ADR12028/c
ID ADR120
XX ADR120
AC ADR120
AC ADR120
DT 23-SEP
XX Human;
KW Human;
KW 5-meth
KW 6-sinc
XX Homo f
XX US2004
PN US2004
XX US2004
XX 24-JUN
XX 06-OC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CC IL-5 or IL-5 receptor a, where the antisense compound modulates the CC expression of mammalian IL-5 or IL-5 receptor a. The antisense CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one conditied sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methyloytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an CC antisense compound so that II-5 signal transduction, IL-5 or IL-5 or IL-5 or IL-5 creceptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a is modulated. The antisense compounds, methods and compositions are cuseful in promoting apoptosis and in treating eosinophilic syndrome and conjugonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 20
                                                                                                                                                                                   Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-0-methoxyethyl sugar 5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rne invention relates to an antisense compound that modulates interlet [11-5] signal transduction. The antisense compound is an antisense obligonucleotide targeted to a nucleic acid molecule encoding a mammal II-5 or II-5 receptor a where the antisense compound modulates the expression of mammalian II-5 or II-5 or II-5 receptor as where the antisense compound modulates the
                                                                                                                                                                                                                                                                                                                                                                     ADR12028 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense compound modulating useful in promoting apoptosis and
                      06-OCT-2003; 2003US-00679532
                                                            24-JUN-2004
                                                                                            US2004121376-A1
                                                                                                                                Homo sapiens
                                                                                                                                                                      eosinophilic syndrome; asthma;
                                                                                                                                                                                                                                                                                                 23-SEP-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1161
                                                                                                                                                                                                                                                         interleukin-5 (IL-5) DNA antisense oligonucleotide #12
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KARRAS J G.
MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                               (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 C;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 77pp; English
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Pred. No. 1.1e+02;
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                                                                                                                                                                      antiasthmatic;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                  sugar moiety;
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CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises CC administering to the mammal a therapeutic or prophylactic amount of an CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DEAN/)
(KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 20;
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KARRAS J
MCKAY R.
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2000WO-US007318
2001US-00800629
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          und modulating apoptosis and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        an antisense compound that modulates interleukin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a mammalian
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Sequence 20 B₽; æ A; 7 C; 2 G; 3 T; 0 U; 0 Other;

Best Loc Matches Query Match Local l Similarity 20; Conserv Conservative 0.6%; SCC 100.0%; Pr Score Pred. Mismatches . 20; DB 1; 1.1e+02; Length 20 Indels <u>.</u> Gaps 0

20 regreerretrectagaa 1

1627 TGGTGGTTTGTTGCCTAGAA 1646

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ADRIZO38/C
ID ADRIZO
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CONT 23-SEP
XX Human;
XX Human;
XW IL-5 r
XW 5-meth
XW 5-meth
XW 6S Homo s
XX PN US2004
XX ADR12038 standard; 23-SEP-2004 (first entry) DNA, 20 ВP

Human interleukin-5 (IL-5) DNA antisense oligonucleotide #22

IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic Human; interleukin-5; IL-5; ss; antisense oligonucleotide; syndrome;

Homo sapiens

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ARESULT 170
ADR12035/c
ID ADR120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CC expression of mammalian IL-5 or II-5 receptor a. The antisense i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'.o-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5 creceptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a condulated. The antisense compounds, methods and compositions are constituted of the five treating ensinophilic syndrome and continual of the five treating ensinophilic syndrome ensinophil
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -5 (11-5) signal transduction. The antisense compound is an a coligonucleotide targeted to a nucleic acid molecule encoding IL-5 or IL-5 receptor a, where the antisense communications.
                                      Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-0-methoxyethyl sugar 5-methylcyrosine; IL-5 signal transduction; apoptosis;
                                                                                                                                  Human interleukin-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 4 A; 8 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 20; SEQ ID
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(KARR/)
(MCKA/)
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17-MAR-2000;
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                         eosinophilic
                                                                                                                                                                              23-SEP-2004
                                                                                                                                                                                                                                                              ADR12035 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        invention relates
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) KARRAS J G.
) MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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2000WO-US007318.
2001US-00800629.
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                      syndrome; asthma; antiasthmatic;
                                                                                                                                                                            (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               und modulating apoptosis and
                                                                                                                                  (IL-5)
                                                                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 to an antisense compound that modulates interleukin sduction. The antisense compound is an antisense
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                                                                                                                                                                                                                                                                20
                                                                                                                                DNA antisense oligonucleotide
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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                                                             2'-O-methoxyethyl sugar
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3. 1.1e+02;
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20
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CC oligonuclectide targeted to a nucleoic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the CC expression of mammalian IL-5 or IL-5 receptor a. The antisense CC oligonucleotide comprises at least one modified internucleoside linkage, CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'.O-methoxyethyl sugar moiety, and at CC least one modified uncleobase, i.e. 5-methylytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or CC tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises CC administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 signal transduction, II-5 or IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a is modulated. The antisense compounds, methods and compositions are CC useful in promoting apoptosis and in treating eosinophilic syndrome and CC asthma. This sequence represents a human IL-5 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 20; SEQ ID NO 57; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  asthma.
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(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
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                                   This sequence represents a human cleotide of the invention.
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2001US-00800629.
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in treating eosinophilic syndrome or
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Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Matches Query Match Best Local 20; Similarity Conservative 100.0%; 0.6%; 0 Score 20; ; Pred. No. Mismatches DB 1; 1.1e+02; Length 20 Indels 0 Gaps

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               2108 TTTTTCACAGAAAAAGTGTG 2127
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RESULT 171
ADR12036/c
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Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
                        Human interleukin-5 (IL-5) DNA antisense oligonucleotide #20
                                                 23-SEP-2004
                                                                         ADR12036;
                                                                                                ADR12036 standard;
                                                (first entry)
                                                                                                DNA;
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ADR12023/
ID ADR1
XX
AC ADR1
XX
DT 23-8
                                                                  RESULT 172
ADR12023/c
ID ADR12023
                                                                                                                                                                                                                                                                                                             CC -5 (IL-5) signal transduction. The antisense compound is an antisense conjugates interleukin in IL-5 or IL-5 receptor a, where the antisense compound is an antisense conjugate in IL-5 or IL-5 receptor a. The antisense conjugate is a cid. At least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at conjugate is a conjugate in it is a conjugate in it is an antisense conforms of mammalian IL-5 receptor a in mammalian cells or the isoforms of mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with conjugate in the isoforms is altered by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 receptor a isoforms is antisense compound so that il-5 is signal transduction, IL-5 or IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a is modulated. The antisense compounds, methods and compositions are conjugated in promoting apoptosis and in treating eosinophilic syndrome and conjugated of the invention.
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                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                     Sequence 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
07-MAR-2001; 2001US-00800629
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                       ADR12023;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an antisense compound that modulates interleukir
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      23-SEP-2004
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(KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MCKA/)
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KARRAS
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                                                                      standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OBS
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      (first
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                                                                                                                                                                                     0.6%; 5--
/ 100.0%; Pred. No.
-ive 0; Mismatches
                                                                                                                                                                                                                                                                                   A; 5 C; 3 G; 10 T; 0 U; 0 Other;
      entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 58; 77pp; English.
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                                                                      ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               interleukin-5 signal transduction, in treating eosinophilic syndrome
                                                                                                                                                                                                                                   .1e+02;
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                                                                                                                                                                                                                                                    Length 20
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RESULT 173 ADR12045/c ID ADR12045

standard;

DNA;

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ВP

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20

ACTCTGAGGATTCCTGTTCC

905 ACTCTGAGGATTCCTGTTCC

20;

Conservative

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The invention relates to an antisense compound that modulates interleukin CC -5 (II-5) signal transduction. The antisense compound is an antisense Coligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5 methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian II-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CC II-5 signal transduction or II-5 or II-5 receptor a expression, or a captes or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5 creceptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a condulated. The antisense compounds, methods and compositions are consolicions are consolicions are consolicions are consolicions and in treating cosinophilic syndrome and colisions are consolicions and compositions are consolicions and compositions are consolicions and compositions and compositions and compositions are consolicions and compositions and compositions are consolicions and compositions and compositions are consolicions and compositions are consolicions and compositions and compositions are consolicions and compositions and compositions are consolicions.
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Matches 20
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17-MAR-2000;
07-MAR-2001;
                                                                                                          useful in promoting apopulation and asthma. This sequence represents a human oligonucleotide of the invention.
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                                                                                 Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 20;
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MCKAY R.

MANOHARAN M.
                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ense compound modulating promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ
                                                                              BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-00280799.
2000WO-US007318.
2001US-00800629.
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                     0.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       77pp; English.
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Score 20; DB; Pred. No. 1.1
0; Mismatches
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                                          DB 1;
                       1.1e+02;
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  Gaps
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Best Local S
Matches 20
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17-MAR-2000;
07-MAR-2001;
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                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                         useful in promo-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an antisense compound that modulates interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 20; SEQ ID NO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound modulating interleukin-5 signal transduction, useful in promoting apoptosis and in treating eosinophilic syndrome
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5-methylcytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; interleukin-5; IL-5;
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                                                                                                                                                                                                                                                                                                                                     oligonucleotide
                                                                                                                                                                                                                                                                                                                                                              is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and asthma. This sequence represents a human IL-5 DNA antisense
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MCKAY R.
                                                                                                                                                                  Similarity
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rccrcrccagacrcrgagga 1
                                                        TCCTCTCCAGACTCTGAGGA
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                                                                                                                                                                                                                                                                  BP; 5
                                                                                                                               0.6%;
ilarity 100.0%;
Conservative
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2000WO-US007318.
2001US-00800629.
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                                                                                                                                                                                                                                                                                                                                     of the invention.
                                                                                                                                                                                                                                                                  A; 4 C; 7 G; 4 T; 0 U; 0 Other;
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                                                                                                                               0;
                                                                                                                               Score 20; DB 1; L
Pred. No. 1.1e+02;
0; Mismatches 0;
                                                                   914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          English.
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                                                                                                                                                                                               Length 20;
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RESULT 174
ADR12049/C.d.y.ds
ID ADR12049;
XX
AC ADR12041;
XX
AC ADR12049;
XX
A
CC -5 (II-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense compound modulates the CC oligonucleotide comprises at least one modified internucleoside linkage, CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'.0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylytosine. Altering the ratio CC of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a sypression, or a CC disease or condition characterised by a reduction in apoptosis comprises CC administering to the mammal a therapeutic or prophylactic amount of an CC antisense compound so that II-5 signal transduction, II-5 or II-5 creceptor a expression, or a condition of an antisense compound so that II-5 signal transduction in apoptosis comprises CC administering to the mammal at the sade or prophylactic amount of an CC antisense compound so that II-5 signal transduction, II-5 or II-5 creceptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression is modulated, the ratio of II-5 creceptor a isoforms is altered, or expression is methods and compositions are
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17-MAR-2000;
07-MAR-2001;
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                                                                  is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and asthma. This sequence represents a human IL-5 DNA antisense oligonucleotide of the invention.
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KARRAS J G.
MCKAY R.
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2000WO-US007318.
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17-MAR-2000; 2000WO-US007318.
07-MAR-2001; 2001US-00800629.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound
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KARRAS J G.

MCKAY R.
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'n promoting und modulating apoptosis and

Example 20; SEQ ID NO 40; 77pp; English.

CC -5 (II.-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian II.-5 or II.-5 receptor a, where the antisense compound modulates the CC expression of mammalian II.-5 or II.-5 receptor a. The antisense compound modulates the CC i.e. a phosphorothicate linkage, or a peptide nucleoside linkage, CC i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II.-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II.-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with CC II.-5 signal transduction or II.-5 or II.-5 receptor a expression, or a CC disease or condition characterised by a reduction, in apoptosis comprises CC administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II.-5 signal transduction, II.-5 or II.-5 o The invention relates to an antisense compound that modulates interleukin

Sequence 20 BP; 0 **≯**; 5 ü σ <u>ი</u> 9 Τ, 0 Ģ 0 Other

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CC oligonuclectide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense CC oligonuclectide comprises at least one modified internucleoside linkage, CI i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. 3'-0-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CI i-5 signal transduction of II-5 or II-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an CC receptor a expression, or II-5 receptor a is modulated, the ratio of II-5 receptor a is forms is altered, or expression of membrane II-5 receptor a septor a is forms is altered, or expression of membrane II-5 receptor a septor a s
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Matches 20
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17-MAR-2000; 2000WO-US007318
07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylyytosine; IL-5 signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an antisense compound that modulates interleukin -5 (IL-5) signal transduction. The antisense compound is an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    eosinophilic
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MCKAY R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                             signal transduction.
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Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       interleukin-5 signal transduction, in treating eosinophilic syndrome
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          The invention relates to an antisense compound that modulates interleukin CC -5 (II-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at CC is a phosphorothicate linkage, or a peptide nucleic acid, at least one CC of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is CC altered. Treating a mammal having a disease or condition associated with CI-5 signal transduction or II-5 or II-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises CC antisense compound so that II-5 signal transduction. II-5 or 
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Best Local (
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(KARR/)
(MCKA/)
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07-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-OCT-2003; 2003US-00679532
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5-methylcytosine; IL-5 signal transduction; apoptosis;
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receptor a expression,
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KARRAS J G.

MCKAY R.
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                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO
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2001US-00800629.
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or IL-5 receptor
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ratio of IL-5
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oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'-0-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methyloytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-1999;
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07-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; interleukin-5; IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis;
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                                                                                                                                                                                                                                                                                                                                                                                                                   Example 20; SEQ ID
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KARRAS J G.
MCKAY R.
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Pred.
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RESULT 179
ADR12046;
ID ADR12046;
XX ADR12046;
XX ADR12046;
XX ADR12046;
XX ADR12046;
XX Human interleukin-5
XX Human; interleukin-5
XX US2004121376-A1.
XX PF 06-OCT-2003; 2003US-XP 07-MAR-2000; 2000WO-PR 07-MAR-2001; 2003US-XP 07-MAR-2001; 2001US-XP 07-MAR-2001; 2000WO-PR 07-MAR-2001; 2001US-XP 07-MAR-2001; 2000WO-PR 07-MAR-2001; 200
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Best Local S
Matches 20
5 (IL-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian IL-5 or IL-5 receptor a, where the antisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'.O-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5 receptor a expression, or II-5 receptor a is modulated, the ratio of II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a is modulated. The antisense compounds, methods and compositions are useful in promoting apoptosis and in treating eosinophilic syndrome and asthma. This sequence represents a human II-5 DNA antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound useful in promoting apo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; interleukin-5; IL-5; 88; antisense IL-5 receptor a; phosphorothioate; 2'-O-mu 5-methylcytosine; IL-5 signal transduction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-479669/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence . 20
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KARRAS J G.
MCKAY R.
MANOHARAN M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGAAATACATTGACGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                            promoting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 3 A; 4 C; 4 G; 9 T; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99US-00280799.
2000WO-US007318.
2001US-00800629.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               syndrome; asthma; antiasthmatic;
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                                                                                                                                                                                                                                                                     relates
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                                                                                                                                                                                                                                                                                                                                                                                                            apoptosis
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                                                                                                                                                                                                                                                                  to an antisense compound that
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mckay
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optosis and
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signal transduction; apoptosis;
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                                                                                                                                                                                                                                                                                                                     77pp;
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Pred. No.
                                                                                                                                                                                                                                                                                                                        English.
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                                                                                                                                                                                                                                                               modulates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  вugar moiety;
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Query Match Best Local S Matches 21

Similarity

0.6%; 11 Ç

Score 19.8; D Pred. No. 1.3e 0; Mismatches

.3e+02 BG 0 Other,

1; Length 24;

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Conservative

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Sequence 24

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<u>..</u> 0 Ģ The present invention relates to phytochrome 10 and its coding sequence (see AAH48097 and AAG64233). The phytochrome and its coding sequence are useful in the diagnosis and treatment of malignant tumour, haemopathy, HIV infection, immunological diseases and various inflammations. The present sequence is a PCR primer, which was used in an example from the present invention

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RESULT 180
ARM48099/c
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XX ARM480
XX ARM480
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Best Local (
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                                                                                                                                                                                                                                                                                             Phytochrome 10 and encoded polynucleotide, treatment of malignant tumor, hemopathy, H. diseases and various inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tissues comprises contact-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Phytochrome 10; cytostatic; anti-HIV; haemopathic; immunomodulatory; malignant tumour; haemopathy; HIV infection; immunological disease;
                                                                                                                                                                                                                                         Example 3; Page 16; 36pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-418238/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           мао Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-DEC-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.1e+02;
                                                                                                                                                                                                                                                                                                                      e, applicable in HIV infection, i
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                                                                                                                                                                                                                                                                                                                      n diagnosis and immunological
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RESULT 181
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                                                                                                                              The invention relates to a system for detecting gene expression, which comprises one or two isolated DNA molecules that detect expression of a gene, where the gene corresponds to any of 8143 oligonucleotides (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful for leukocyte expression profiling. It is particularly useful for diagnosing a disease, monitoring (rate of) progression of a disease, predicting therapeutic outcome, determining prognosis for a patient, predicting disease complications in an individual or monitoring response to treatment in an individual. The diseases include cardiac allograft rejection, kidney allograft rejection, liver allograft rejection, atherosclerosis, congestive heart failure, systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis or cytomegalovirus inferrica
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                Claim 1;
                                                                                                                                                                                                                                                                                                                                          New system for leukocyte expression profiling, diagnosing a disease, or monitoring (the rate of) progression of a disease, e.g. atherosclerosis or congestive heart failure, comprises diagnostic oligonucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                  WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                          Wohlgemuth J, Ly N, Woodwa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-OCT-2000;
08-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200257414-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            T7; leukocyte; gene expression profiling; allograft rejection; atherosclerosis; congestive heart failure; systemic lupus erythematosus; rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human leukocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABZ03720
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BIOC-)
                                                                 Local
                           2345
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
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 47
                                                    l Similarity
27; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                             Woodward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BIOCARDIA INC.
              TTTCAGGCATACTGACACTTTGCCAGAAAGCATAAAATTC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGATGTGGGGAGCAGGGACACA 2779
                                                                                                                                                                                                                                                                                                                Page 445;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard;
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TTTCTGGCAAAGTGTCAGTATGCCTGAAATATTTACTTTC
                                                                                                          BP; 19
                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000US-0241994P
2001US-0296764P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene expression
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Quertermous T,
                                                                                                       A; 9 C; 11 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                Opp; English.
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                                                                0.6%;
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                                                    0,
                                                Score 19.2; DB 1;
Pred. No. 1.8e+02;
""matches 13;
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                                                                                                                                                                                                                                                                                                                                                                                                                             Prentice F;
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                                                                           Length 50;
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                                                    Indels
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Best Local (
                                                                                                                                                                                                                                                                                                        The invention relates to a system for detecting gene expression, which comprises one or two isolated DNA molecules that detect expression of a gene, where the gene corresponds to any of 8143 olligonucleotides (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful for leukocyte expression profiling. It is particularly useful for diagnosing a disease, monitoring (rate of) progression of a disease, predicting therapeutic outcome, determining prognosis for a patient, predicting disease complications in an individual or monitoring response to treatment in an individual. The diseases include cardiac allograft rejection, kidney allograft rejection, liver allograft rejection, atherosclerosis, congestive heart failure, systemic lupus erythematosus, because of a systemic lupus erythematosus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New system for leukocyte expression profiling, diagnosing a disease, or monitoring (the rate of) progression of a disease, e.g. atherosclerosis or congestive heart failure, comprises diagnostic oligonucleotides.
                                                                                                                                                                                                                                                                     Sequence 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 390; Opp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-OCT-2000; 2000US-0241994P.
08-JUN-2001; 2001US-0296764P.
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                                                                               ADG33606 standard;
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                            26-FEB-2004
                                                                                                                                                                                                                                                                                                 rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wohlgemuth J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BIOC-) BIOCARDIA INC
                                                                                                                                                                                 2345
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  leukocyte
                                                                                                                                                       47
                                                                                                                                                                                                             27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Woodward
                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                  TTTCAGGCATACTGACACTTTGCCAGAAAGCATAAAATTC
                                                                                                                                                                                                                                                                                               arthritis, osteoarthritis or cytomegalovirus
                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                     BP; 19
                          (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
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                                                                                 DNA;
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Quertermous
                          entry)
                                                                                                                                                                                                                          0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   expression profiling
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                                                                                                                                                                                                             <u>,</u>
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Pred. No.
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Tohnson
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No. 1.8e+02;
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                                                                                                                                                                                                                                                                     U; 0 Other;
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                                                                                                                                                                                                                                                                                                  infection
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SeqID930.
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RESULT 183
ADG33606/c
ID ADG336
  ZZZZZZZZZZZZZZZZZ
human; ss; autoimmune; chronic inflammatory disease; SLE; systemic lupus erythematosis; rheumatoid arthritis; cholecystitis; Sjogren's disease; CREST syndrome; scleroderma; ankylosing spondylitis; ulcerative colitis; primary sclerosing cholangitis; appendicitis;
                                                                       Human
                                                                      DNA
                                                                      probe
                                                                       used
                                                                       ç
                                                                      monitor expression of
                                                                       diagnostic
                                                                       genes
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RESULT 182 ABZ02014/c ID ABZ020 XX

ABZ02014

standard;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CC This invention relates to novel methods for diagnosing and monitoring CC autoimmune and chronic inflammatory diseases. Specifically, it refers to Ct the identification of genes that have a clinical utility as diagnostic CC tools for the management of, in particular, patients with systemic lupus CC erythematosis (SLE) or rheumatoid arthritis (RA). Accordingly, the gresent invention describes a method for determining the levels of CC multiple differentially expressed genes of a patient, in a concerted CC manner, in order to achieve an improved diagnostic assay with sensitivity CC and specificity for the disease in question. As such, these genes are CC useful for the diagnosis of various other inflammatory disorders CC including cholecystitis, Sjogren's disease, CREST syndrome, sclerosing CC cholangitis, appendicitis, diverticulitis, and primary biliary sclerosis. CC This oligonucleotide is a human DNA probe used to monitor the expression cc level of the differentially expressed diagnostic genes of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 27; Conserv
                    06-JUN-1996;
                                                                                                               Synthetic
                                                                                                                                               Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleu
                                                                                                                                                                                              Human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 50 BP; 19 A; 9 C; 11 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Diagnosing or monitoring autoimmune and chronic inflammatory diseases, such as rheumatoid arthritis, systemic lupus erythematosus, ulcerative colitis, psoriasis and asthma by detecting the expression level of one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diverticulitis;
                                                   19-DEC-1996.
                                                                                                                                                                                                                             12-SEP-1997
                                                                                                                                                                                                                                                                                           AAT76223 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 930;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wohlgemuth J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-APR-2002; 2002US-00131827.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-APR-2003; 2003WO-US013015
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                                                                                W09640162-A1
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                                                                                                                                                                                                                                                                                                                                                                                              2345 TTTCAGGCATACTGACACTTTGCCAGAAAGCATAAAATTC
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                                                                                                                                                                                                                                                                                                                                                                        TTTCTGGCAAAGTGTCAGTATGCCTGAAATATTTACTTTC
                                                                                                                                                                                              antisense oligonucleotide HUMIL5AS4.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                             (first
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                    96WO-US009306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 primary biliary sclerosis; probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.6%;
                                                                                                                                                                                                                             entry)
                                                                                                                                               pulmonary disease; bronchitis; interleukin; ss
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Pred. No. 1.8e+
0; Mismatches
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..8e+02;
les 13; Indels
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Query Match
Best Local S
Matches 19
                                                                                                                                                                     which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMILSAS4 specific for the human ILS. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyper-
                                                                                                   Sequence 19 BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       subject.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Treatment of airway diseases such as asthma adenosine-free antisense oligo:nucleotide to
                                                                                                                                                        reactive airways
                                                                                                                                                                                                                                                                                                                                                                                                         A method for treating airway disease in a subject has been produced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1997-051871/05
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     19;
                            Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 31;
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0.6%; So ilarity 100.0%; I Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   71pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        English.
                            Score 19; DB 1;
Pred. No. 1.2e+
     Mismatches
                            1.2e+02;
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    by topically applying
airway epithelium of

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     Indels
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AAX54019; AAX54019 standard; 2127 GGAGAAGAAAGACGGAGAG 2145 19 GGAGAAGAAAGACGGAGAG (firet DNA;

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Human IL-5 antisense oligonucleotide fragment.

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RESULT 185
AAXS4019/C
ID AAXS400
XX AAXS40
AC AAXS40
AC AAXS40
DT 05-JUL
XX Antise
KW Antise
KW impair
KW pulmon
KW chroni
KW chroni
KW chroni
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KW pulmon
KW beste
XX Poste
XX IT-SEP
XX 17-SEP
Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis; acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepaticestasis; hepaticesticarcinoma; kidney cancer; melanoma; hepatic metastasis; 17-SEP-1997; 09-JUN-1998; Synthetic. 25-MAR-1999 prostate cancer; WO9913886-A1 97US-0059160P 98US-00093972 98WO-US019419 88.

Nyce JW;

(UYEC-) UNIV

EAST CAROLINA

WPI; 1999-229400/19

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RESULT 186
AAA33463/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inhibitor; allergy; allergic disease; bronchoconstriction; inhibitor; antiflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA33463 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 49; 120pp; English
WPI; 2000-205971/18
                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                   cancer; leukaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Low adenosine antisense oligonucleotide SEQ ID NO:1152.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           directed against at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 vasoconstriction.
                                                                                                                                                                                                                                         24-FEB-2000
                                                                                                                                                                                                                                                                                      WO200009525-A2
                                                                                                                                                                                                                                                                                                                                                                                                       respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; C
                                                                                                                                                                                       03-AUG-1999;
                                                                                            (UYEC-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        specification describes antisense oligonucleotides (AAX52869-X55271) scted against at least 2 mRNAs selected from target genes, coding and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2127
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                            EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        including breast and prostate cancer
                                                                                                                                          98US-0095212P
                                                                                                                                                                                         99WO-US017712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; 9 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                 lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 19;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.2e+02;
hes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       vasoconstriction; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                            COPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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cc e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, cc impeded respiration, respiratory distress syndrome, pain, cystic cc fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including threast and prostate cancer. The reduction of the adenosine content of the CONs reduces side effects. The A-containing ONS break down with the crelease of deoxyadenosine which activates adenosine receptors causing CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the CC nucleotide sequences given in the sequence listing from the present cc invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 crom the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to CAAA3392) are specifically claimed ONS from the present invention. N.B. Sequences given in the disclosure of the present invention do not match comp with their corresponding SEQ ID NO: sequences given in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconatriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, inflammation, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating effects afflict the lungs of a subject. They can be used for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 18; Page 409; 1343pp; English.
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Sequence 19 BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;

S Query Match
Best Local Similarity
Matches 19; Conserv 2127 GGAGAAGAAGACGGAGAG 2145 Conservative 100.0%; 0.6%; ; Score 19; DB %; Pred. No. 1.2 0; Mismatches DB 1; 1.2e+02; Length 19; Indels 0 Gaps 0

AAF19585 standard; DNA; 19 BP.

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19

Human IL5 polynucleotide fragment #1152.

14-MAR-2001 AAF19585

(first entry)

RESULT 187
AAF19585/c
ID AAF195
XX
AC AAF195
DT 14-MAI
DE Human
XX
Low a
KW Low a
KW Low a
KW Inmuur
KW surfe
KW resp:
KW worf:
KW canc
XX
PD 26XX
PD 26XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vascoonstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysems; pulmonary transplantation rejection; pulmonary transplantation rejection; 88. obstructive pulmonary

sapiens.

WO200062736-A2

26-OCT-2000

24-MAR-2000; 2000WO-US008020

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RESULT 188
ABZ95279/c
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                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cc immunosuppressive, antiasthmatic, hypotensive and cytyostatic activities.

cc expression and or activity of target polypeptides associated with activities.

cc lung/respiratory disorders and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, cimmunoglobulins and antibodies, antibody receptors, cytokines and cc chemokines, endogenously produced specific and non-specific enzymes, communoglobulins, adenosine receptors, antibody receptors, cytokines and cc chemokines receptors, adenosine receptors, bradykinin receptors, contral cc nervous system (NS) and peripheral nervous and non-nervous system peptide cransmitters, defensine, growth factors, vasoactive peptides and creeptors, binding proteins and malignancy associated proteins. The cincluding respiratory obstruction (especially pulmonary obstruction and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, cystic fibrosis (CF), allergies, asthma, impeded respiration, respiratory distress syndrome cc and/or senton, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary transplantation rejection, pulmonary disease (COPD), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary cancer. ARF18434 to ARF21543 represent human polynucleotides cc fragments and antisense oligonucleotides used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 19
         Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19
                                                                                                                              Human
                                                                                                                                                                   17-OCT-2003
                                                                                                                                                                                                                                           ABZ95279 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 14; Page 208; 1592pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and respiratory obstructions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-679539/66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           can have respiratory,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    present invention describes low adenosine
                                                                                                                                                                                                                                                                                                                                                                          2127
                                                                                                                              IL-S
                                                                                                                                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                      GGAGAAGAAAGACGGAGAG 2145
                                                                                                                                                                                                                                                                                                                                     GGAGAAGAAAGACGGAGAG 1
                                                                                                                              antisense
                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 0 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EAST CAROLINA
                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-0127958P.
                                                                                                                          fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           bronchodilator, antiinflammatory, analgesic,
                                                                                                                                                                                                                                           ВP
                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                              Score 19;
Pred. No.
                                                                                                                            no.1143.
                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                              1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  content antisense them. In the antisense
                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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The invention relates to a novel pharmaceutical composition, which has a CC first active agent comprising an oligonucleotide antisense to the CC initiation codon, coding region, 5' or 3' end genomic flanking regions, CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of gunctions of genes encoding a polypeptide associated with lung and/or CC nasal alrway dysfunction and a second active agent comprising an CC antiinflammatory steroid and ubiquinone. A composition of the invention CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive, and cytostatic activity. The composition may have a CC use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also CC for enhancing the prophylactic or therapautic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of adenosine creceptor, producing bensitivity to adenosine, reducing or depleting levels of continuous pensitivity to adenosine, reducing levels of adenosine creceptor, producing bronchodollation, increasing levels of adenosine or lung inflammation, lung allergies, or a respiratory disease or condition. Once: The sequence data for this patent is not represented in the printed specification, but was obtained for segmences.
Best Loc
Matches
                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nyce J
Miller
                                                                     Sequence 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-APR-2001; 2001US-0286137P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-APR-2002; 2002WO-US013135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ubiquinone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200285308-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (EPIG-)
               Local
                                                                                                   ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JW,
19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Li Y,
Tang
                                                                     BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ID NO 10521; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sandrasagra A,
L, Shahabuddin
                  100.0%;
                                 0.6%;
<u>..</u>
                                 Score 19;
                  Pred. No.
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Katz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'n
                                   DB 1;
                1.2e+02
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0
                                Length 19
Indels
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á 2127 GGAGAAGAAGACGGAGAG 2145 Gaps

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19

GGAGAAGAAGACGGAGAG

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ZZZZZZZZZZZZZZZ
                                                                                                                                                                                                                                                                                       RESULT 189
Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
                                                                                                                                                                           29-JUL-2004
                                                                                                                                                                                                                                                      ABD19253 standard; DNA;
                                                                                                                                                                                                                ABD19253;
                                                                                                                                                                           (first entry)
                                                                                                                                    fragment
                                                                                                                                                                                                                                                        19
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                                                                                                                                                                                CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery

CC device, in separate containers, (b) the oligonuclectides, (c)

CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has antiallergic, antiinflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered

CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The

CC pulmonary obstruction, and/or bronchoconstriction and/or lung

CC inflammation, allergies and/or surfactant hypoproduction are associated

CC with a disease or condition such as pulmonary vasoconstriction,

CC inflammation, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC thymidines present in the target RNA serves to prevent the breakdown of

CC thymidines present in the target RNA serves to prevent the breakdown of

CC thymidines present in the target that free adenosine into the system

CC consociated effects due to it
                                                                         Query Match
Best Local S
Matches 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes a novel composition (a) a first active agent, comprising oligonuclectides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating oligonucleotides are nolvoceptide associated with lung airway or lung
                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 15; SEQ ID NO 10521; 763pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  bronchodilating agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-APR-2001; 2001US-0286036P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-APR-2002; 2002WO-US013143
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ds.
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                                    2127
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19
                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EPIGENESIS PHARM INC
                                                                                                                                                     19
                                  GGAGAAGAAGACGGAGAG 2145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Li Y,
Tang
                                                                                                                                                     BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
                                                                           Conservative
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L, Shahabuddin
                                                                                            100.0%;
                                                                                            0.6%; Score 19;
100.0%; Pred. No.
                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Katz E,
                                                                         Mismatches
                                                                                                              DB 1;
                                                                                            1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pabalan J,
                                                                         <u>.</u>
                                                                                                              Length 19;
                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aguilar D;
                                                                       0,
                                                                       Gaps
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RESULT 190 AAF74302/c ID AAF743 XX

AAF74302 standard;

DNA;

22 BP.

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RESULT 191
AAC73662/c
ID AAC736
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Best Local (
                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Guo
                                                                                                                                                                                                                                                    AAC73662
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergicanner and inflammatory reactions in dogs. The present sequence is a Pp primer used to obtain the sequences of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel canine interleukin 5 polynucleotide and polypeptides are used for generating antibodies which are useful in treating allergies in dogs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-191542/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-AUG-2000; 2000WO-US021651
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Mus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dog; interleukin-5; IL-5; allergy; cancer; inflammatory reaction; PCR primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Canine interleukin-5 coding sequence PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF74302;
 26-MAR-1999;
                      17-MAR-2000; 2000WO-US007318
                                              05-OCT-2000.
                                                                                                    Mus musculus
                                                                                                                                     antisense oligonucleotide; ar
IL-5 receptor-alpha; asthma;
                                                                                                                                                          Mouse; interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                   Murine IL-5 antisense oligonucleotide ISIS
                                                                                                                                                                                                         02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 47; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-FEB-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200111049-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                    WO200058512-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (IDEX-) IDEXX LAB INC
                                                                                                                           inflammation;
                                                                                                                                                                                                                                                                                                                                   2196 GAGTGGATAATAGAAAGTTGAG 2217
                                                                                                                                                                                                                                                                                                              22
                                                                                                                                                                                                                                                                                                                                                          20;
                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lawton R,
                                                                                                                                                                                                                                                                                                                                                                                                      22 BP; 4 A; 9 C; 1 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                    standard;
                                                                                                                                                                                                                                                                                                               GAGTGGACAATGGAAAGTTGAG 1
                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                            cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99US-00371615
99US-00280799
                                                                                                                                                                                                                                                                                                                                                                     0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mermer B,
                                                                                                                                                                                                                                                      DNA;
                                                                                                                                                 antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                          ..
                                                                                                                                                                                                                                                                                                                                                          Score 18.8; DB 1;
Pred. No. 1.4e+02;
0; Mismatches 2;
                                                                                                                                   nciasthmatic; immunosuppressive; cytostatic; eosinophilic syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Aiyappa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene therapy;
                                                                                                                                                                                   #16988.
                                                                                                                                                                                                                                                                                                                                                                               Length 22;
                                                                                                                                                                                                                                                                                                                                                            Indels
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                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                         illergies,
is a PCR
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RESULT 192
AAC73722/c
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Best Local S
Matches 19
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The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dean
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                         Example
                                                                                                                                                                                                                                                                  17-MAR-2000; 2000WO-US007318.
                                                                                                                                                                                                                                                                                               05-OCT-2000
                                                                                                                                                                                                                                                                                                                            WO200058512-A1
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                                                                                                                                                                                                                                       26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                  inflammation; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                              antisense oligonucleotide; a:
IL-5 receptor-alpha; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1986 TAAAGAAATACATTGACGGC 2005
                                                                                                                                                2000-594648/56
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                                                                                                                                                                                                          SISI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2;
                                                                         20;
                                                                                                    oligonucleotide compound used to in humans modulates interleukin-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAAAGAAATACATTGACCGC
                                                                                                                                                                           Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Page 48; 156pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 4 A;
                                                                         Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PHARM INC
                                                                                                                                                                                                          PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                       9908-00280799
                                                                         64;
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95.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 C; 4 G; 9 T; 0 U; 0 Other;
                                                                       156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     oligonucleotide ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   is an oligonuclectide used for antisense modulation
                                                                                                                                                                             Mckay
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                                                                                                                                                                                                                                                                                                                                                                                                             antiasthmatic;
a; eosinophilic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                              immunosuppressive; cytostatic;
syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #17989
                                                                                                  treat asthma and eosinophilic signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
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CATACTGACAGTTTGCCAGA

2352 CATACTGACACTTTGCCAGA

2371 .

Query Match Best Local S Matches 19

Similarity

95.0%;

Score Pred.

18.4; No. 1

.4e+02

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Length

Indels

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Conservative

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Mismatches

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RESULT 193
AAC73719/C
ID AAC737
XX AC AAC737
XX D2-FEE
XX Human
XX Human
XX Human
XX Human
XX II-5 I
XW antise
XX IO-OC1
XX O2-OC1
XX IO-OC1
XX IO
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Best Local S
Matches 19
                                                      The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosir syndrome. The oligonucleotides are also useful for research uses prevent or delay infection, inflammation or tumour formation
  Sequence
                                                                                                                                                                                                                                                                                                                                                                 Antisense oligonucleotide compound used to treat asthma and eousyndrome in humans modulates interleukin-5 signal transduction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; interleukin-5; IL-5; signal transduction;
antisense oligonucleotide; antiasthmatic; immuno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human IL-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-OCT-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IL-5 receptor-alpha; asthma;
inflammation; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-FEB-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (-SISI)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2416
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                           20; Page 64; 156pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGTATTTTCCTCCAGGCAA
     20 BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGTATTTTCGTCCAGGCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Karras
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A; 4 C; 5 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mckay
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Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        eosinophilic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        infection;
                                                                                                                                                                                                                                                                                                                                                                                              and eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20;
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RESULT 194
AAF74301
ID AAF74301
ID AAF74301
ID AAF7430
XX AAF743
XX AAF743
XX Canine
XX Conine
XX Dog; if
XW inflam
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ABX04376/c
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    PFX PD XXX SO SX XXX DE XXX AC XXX
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Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                 ABX04376 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 47; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel canine interleukin 5 polynucleotide generating antibodies which are useful in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-191542/19.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-AUG-2000; 2000WO-US021651
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dog; interied inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Canine interleukin-5 coding sequence PCR primer
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                                                                                                                                           Homo sapiens.
Synthetic.
                                                                                                                                                                                                              Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; immunosuppressant; eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                                                                                                                  13-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                 ABX04376
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07-MAR-2001; 2001US-00800629.
                                               12-SEP-2002
                                                                                              US2002128216-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          present invention provides the protein and coding sequences of the ine interleukin-5 (IL-5) protein. This can be used to treat allergies cer and inflammatory reactions in dogs. The present sequence is a PCR mer used to obtain the sequences of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       interleukin-5; IL-5; allergy; cancer;
ammatory reaction; PCR primer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              635 CATTGGTGAAAGAGACCTTG 654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens.
                                                                                                                                                                                                                                                                                   Interleukin 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IDEXX LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGTGGTGAAAGAGACCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA;
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                                                                                                                                                                                                                                                                                      antisense
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 18.4;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                   oligonucleotide ISIS 17989.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Aiyappa AP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.4e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and polypeptides an treating allergies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene therapy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    are used for
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RESULT 196
ABX04373/c
ID ABX043
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, an a diagnostic kit for detecting the expression level of the membrane form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (DEAN/)
(KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dean NM,
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17-MAR-2000;
                                                                                                                                                                                                                                                                                 ABX04373;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     transduction
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                                                                                                                                                                                             Human; 88; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
                                                                                                                                                                                                                          Human Interleukin 5 antisense oligonucleotide ISIS 17986.
                                                                                                                                                                                                                                                       13-JAN-2003
                                                                                                                                                                                                                                                                                                             ABX04373
                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MCKA/)
                                                                                                                                                      Homo sapiens
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                                                                                                                                                                                mmunosuppressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                              2416
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                                                                                                                                                                                                                                                                                                                                                                                                                                          19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.6%;
Similarity 95.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                which modulates interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                     AAGTATTTTCCTCCAGGCAA 2435
                                                                                                                                                                                                                                                                                                             standard;
                                                                                                                                                                                                                                                                                                                                                                                   AAGTATTTTCGTCCAGGCAA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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2000WO-US007318.
                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             relates to an antisense
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                                                                                                                                                                                                                                                                                                             DNA;
                                                                                                                                                                                eosinophilic syndrome; asthma
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                                                                                                                                                                                                                                                                                                                ВP
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              se compound of 8-30 nucleobases in (IL)-5 signal transduction. Also
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.4e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
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26-MAR-1999; 99US-00280799. 17-MAR-2000; 2000WO-US007318.

07-MAR-2001; 2001US-00800629

US2002128216-A1

12-SEP-2002

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Karras JG,

Mckay R,

Manoharan

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RESULT 197
ABXO4316/c
ID ABXO43
XX ABXO43
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XX MOUSE
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Best Local S
Matches 19
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                                                                                                                                                                                                                                                                    Mouse; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic; immunosuppressant; eosinophilic syndrome; asthma.
                                                                                              26-MAR-1999;
17-MAR-2000;
                                                                                                                                            07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                          US2002128216-A1
                                                                                                                                                                                                                                                                                                                Mouse Interleukin 5 antisense oligonucleotide ISIS 16988
                                                                                                                                                                                                                                                                                                                                                                                  ABX04316;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                            12-SEP-2002
                                                                                                                                                                                                                                                                                                                                                 13-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                               ABX04316 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DEAN/)
(KARR/)
(MCKA/)
(MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example
                                                                    (DEAN/)
                                                  KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2352 CATACTGACACTTTGCCAGA 2371
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
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                 DEAN N M.
KARRAS J G.
MCKAY R.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KARRAS J G.
MCKAY R.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATACTGACAGTTTGCCAGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                   (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    relates to an antisense
                                                                                                                9908-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; 4 C; 5
                                                                                                                                                                                                                                                                                                                                                                                                               DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.6%;
95.0%;
                                                                                                                                                                                                                                                                                                                                                   entry)
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Pred. No. 1.4e
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      compound of 8-30 nucleobases IL)-5 signal transduction. Als
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .4e+02;
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RESULT 198
ADR12050/c
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting mouse IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel ant syndrome
                                                                                                                      26-MAR-1999; 99US-00280799
17-MAR-2000; 2000WO-US007318
07-MAR-2001; 2001US-00800629
                                                         (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                         IL-5 receptor a; phosphorothioate;
5-methylcytosine; IL-5 signal tran
                                                                                                                                                                                                                                                                                                                                                     Human; interleukin-5; IL-5; 88; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                    Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or dilu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (IL)-5 signal transduction. Also
              Dean
                                                                                                                                                                                 06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                              US2004121376-A1
                                                                                                                                                                                                                                                                            Homo
                                                                                                                                                                                                                                                                                                         eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                23-SEP-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADR12050 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1986 TAAAGAAATACATTGACGGC 2005
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                                                                                                                                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antisense compound for treating disease/condition e.g. eosinophilic ome or asthma associated with interleukin-5 or IL-5 receptor ssion or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                    interleukin-5 (IL-5)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19;
                                           DEAN N M.
KARRAS J G.
MCKAY R.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
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            Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                         syndrome; asthma; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA;
           Mckay R,
                                                                                                                                                                                                                                                                                                                    horothioate; 2'-O-methoxyethyl sugar moiety;
signal transduction; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                  DNA antisense oligonucleotide #34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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Pred. No. 1
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              Manoharan
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ADR11993/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CC i.e. a phosphorothicate linkage, or a peptide nucleic acid, at least one condified sugar moiety, i.e. a 2'.O-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or CC cissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is CC clisered. Treating a mammal having a disease or condition associated with CC II-5 signal transduction or II-5 or II-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that II-5 signal transduction, II-5 or II-5 or CC receptor a expression, or II-5 receptor a is modulated. The antisense compounds, methods and compositions are CC useful in promoting apoptosis and in treating eosinophilic syndrome and CC eliconucleotide of the invarience.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                               26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
   (DEAN/) DEAN N I
(KARR/) KARRAS (
(MCKA/) MCKAY R
                                                                                                                                                                                                                                                                                                                                                    US2004121376-A1.
                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5-methylcytosine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mouse; interleukin-5; IL-5; ss; antisense oligonucleotide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Murine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADR11993 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligonucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to an antisense compound that modulates interleukin -5 (II-5) signal transduction. The antisense compound is an antisense oligonucleotide targeted to a nucleic acid molecule encoding a mammalian II-5 or II-5 receptor a, where the antisense compound modulates the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 20;
                                                                                                                                                                                                                                    06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                             24-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2352
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   receptor a; phosphorothicate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19;
) DEAN N M.
) KARRAS J G.
) MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             interleukin-5 (IL-5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATACTGACACTTTGCCAGA 2371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATACTGACAGTTTGCCAGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 5 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID
                                                                                                                  99US-00280799.
2000WO-US007318.
2001US-00800629.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                syndrome; asthma; antiasthmatic; cytostatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IL-5 signal transduction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NO 72; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 C; 5 G; 6 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 18.4;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antisense oligonucleotide #14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               interleukin-5 signal transduction, in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2'-0-methoxyethyl sugar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
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CC -5 (II-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC II-5 or II-5 receptor a, where the antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense compound modulates the CC expression of mammalian II-5 or II-5 receptor a. The antisense compound modulates the CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'.O-methoxyethyl sugar moiety, and at CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian II-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with CC lifers in transduction or II-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or grophylactic amount of an CC antisense compounds so that II-5 signal transduction, II-5 or II-5 CC receptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a isoforms is altered, or expression of membrane II-5 receptor a sendulated. The antisense compounds, methods and compositions are continued in treating eosinophilic syndrome and continued in the composition and compositions are continued in the composition and compositions and compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound useful in promoting apo
                                                          oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to an antisense compound that modulates interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MANO/) MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID
                                                          of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NO 15; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    apoptosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d modulating poptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mckay
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       interleukin-5 signal transduction, in treating eosinophilic syndrome
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밁 S Matches 19; Query Match Best Local Similarity Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other; 1986 TAAAGAAATACATTGACGGC 2005 20 TAAAGAAATACATTGACCGC 1 Conservative 0.6%; 0; Score 18.4; Pred. No. 1 Mismatches .4e+02; DB 1; Length Indels 20 0, Gaps ٥,

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26-MAR-1999;
17-MAR-2000;
07-MAR-2001;
                                                                                                                                     Human; interleukin-5, IL-5; ss; antisense oligonucleotide; IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                               Human interleukin-5 (IL-5) DNA antisense oligonucleotide #37
                                                                                                                                                                                                                                                                  ADR12053
                                              06-OCT-2003; 2003US-00679532.
                                                                                           US2004121376-A1
                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                  standard;
 2000WO-US007318.
2001US-00800629.
                                                                                                                                                                                                                      (first entry)
                        99US-00280799
                                                                                                                                                                                                                                                                  DNA;
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                                                                                                                                                                                                                                                                                                               RESULT 201
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Best Local S
Matches 19
                                                                                               interleukin-5; specific; cleavage; target RNA; protein; {
  inhibitor; inhibition; ribozyme; treatment; prophylaxis;
  psoriasis; asthma; inflammatory diseases; restenosis;
  cardiovascular condition; hypertension.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one modified sugar moiety, i.e. a 2'.O-methoxyethyl sugar moiety, and at least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition associated with IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a disease or condition characterised by a reduction in apoptosis comprises administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 signal transduction, IL-5 or IL-5 receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5 receptor a isoforms is altered, or expression of membrane IL-5 receptor a sereptor a satisface compounds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oligonucleotide targeted to a nucleic acid molecule encoding a mammaliar IL-5 or IL-5 receptor a, where the artisense compound modulates the expression of mammalian IL-5 or IL-5 receptor a. The antisense oligonucleotide comprises at least one modified internucleoside linkage,
                                           WO9402595-A1
                                                                      Synthetic
                                                                                                                                                                                                                                                                                     AAQ57192
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(KARR/)
(MCKA/)
                                                                                                                                                                               Enzymatic
                                                                                                                                                                                                           25-MAR-2003
26-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an antisense compound that modulates interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dean
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modulated. The antisense compounds, methods and compositions are eful in promoting apoptosis and in treating eosinophilic syndrome and thma. This sequence represents a human IL-5 DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                          2416
                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                       19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                              AAGTATTTTCCTCCAGGCAA 2435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                     standard;
                                                                                                                                                                               RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 signal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                       0.6%;
larity 95.0%;
Conservative
                                                                                                                                                                                                         (revised)
(first en
                                                                                                                                                                             molecule IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Α,
                                                                                                                                                                                                                                                                                   mRNA;
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                                                                                                                                                                                                         entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 C; 4 G; 6 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mckay R,
                                                                                                                                              cleavage; target RNA; protein; expression;
                                                                                                                                                                                                                                                                                     18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        77pp;
                                                                                                                                                                          mRNA target sequence
                                                                                                                                                                                                                                                                                                                                                                                                                       ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                     Score 18.4; DB 1,
Pred. No. 1.4e+02,
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Manoharan M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      interleukin-5 signal transduction, in treating eosinophilic syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>;</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 compound is
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   an
                                                                                                                                prevention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antisense
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                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 202
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Best Local Sim:
Matches 18;
23-FEB-1994;
29-MAR-1994;
04-APR-1994;
07-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-DEC-1992;
07-DEC-1992;
07-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This is an II-5 mRNA target sequence (nucleotide no. 88) of an enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a psoriatic or asthmatic condition. The concin. of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of
                                                                                                                                                                 human
                                                                                                                                                                                                 gene expression; downregulation; interleukin-5; IL-5; ICAM-intercellular adhesion molecule; rel A; tumour necrosis fact TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogutannalocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis;
                                                                                                                                Homo
                                                                                                                                                                              myocardial ischaemia; Kawasaki disease; septic shock;
                                                                                                                                                                                                                                                                                                                        25-MAR-2003
22-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18
                                                           23-FEB-1995;
                                                                                                                                                                                                                                                                                                  Human
                                                                                                                                                                                                                                                                                                                                                          AAT54734;
                                                                                                                                                                                                                                                                                                                                                                                   AAT54734 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Enzymatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02-JUL-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Enzymatic RNA molecules which cleave mRNA - used to treat or inflammatory, arthritic, stenotic or cardiovascular diseases
                                                                                                                               Bapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1994-048853/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        596 CCTACGTGTATGCCATCC 613
                                                                                                                                                                                                                                                                                                  IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3, Page 17; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RIBOZYME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , MS
                                                                                                                                                                                                                                                                          nucleic
                                                                                                                                                                                                                                                                                                  hammerhead ribozyme target sequence (nt. position
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 3 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                   (revised)
94US-00201109.
94US-00218934.
94US-00222795.
94US-00224483.
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92US-00987132.
92US-00989848.
92US-00989849.
93US-00008895.
                                                           95WO-IB000156
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                                                                                                                                                                                                                                                                          acid; ribozyme; trans cleavage; inhibition;
                                                                                                                                                                                                                                                                                                                        entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18;
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.3e+02;
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                                                                                                                                                                  deficiency syndrome; AIDS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                               HIV;
                                                                                                                                                                                                                                         oncogene,
                                                                                                                                                                                                                                                     factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
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AAT54731
ID AAT
XX
AC AAT
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AC AAT
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DT 25-
DT 22-
XX
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                                                                                             RESULT
                                                                                                                                                                                                                                               CC The present sequence represents a preferred target sequence for an CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (II-5) mRNA at the nucleotide base position indicated in the DE line. Regions CC of the mRNA that do not form secondary folding structures and that CC contain potential hammerhead and hairpin ribozyme cleavage sites were CC identified by computer analysis. Ribozymes directed against these mRNA CC sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the II-5 target sequences CC and thereby inhibit II-5 expression, making them useful for treating CC chronic asthma, e.g. by inhibiting the synthesis of II-5 in lymphocytes CC and preventing the recruitment and activation of eosinophils. The CC ribozymes can also be used to treat eosinophilia (related to parasitic CC infection or with pulmonary infiltration) and L-tryptophan-associated CC eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI CC field.)
                                                                                                                                                                             Query Match
Best Local S
Matches 11
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02-SEP-1994

08-SEP-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

03-OCT-1994

07-OCT-1994

11-OCT-1994

11-OCT-1994

10-NOV-1994

10-NOV-1994

10-NOV-1994
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Grimm S, K
Modak A, F
Tracz D, U
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17-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ribozymes having modified base in inhibiting disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-APR-1994;
18-MAY-1994;
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           25-MAR-2003
22-APR-1997
                                                                                                                                                                                                                            Sequence
                                                                     AAT54731
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                                                                                                                                                                             l Similarity
11; Conserv
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GAUUCCUGUUCCUGUACA 18
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                                                                     standard;
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Usman N,
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Pavco P,
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           (revised)
(first entry)
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94US-00245746
94US-00245736
94US-00271280
94US-00291433
94US-00292620
94US-00293520
94US-00300000
94US-003011486
94US-00311749
94US-00311749
94US-00311749
94US-0031179
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94US-00316771
94US-00319492
94US-00337608
94US-00337608
94US-00337608
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                                                                     RNA;
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Beigleman L,
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ch K, Matulic-Adamic J, Mcswi
n L, Sullivan SM, Sweedler D,
                                                                                                                                                                                         Score 18; DB 1;
Pred. No. 1.3e+02
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ler D, Thompson
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23-FEB-1994

29-MAR-1994

04-APR-1994

15-APR-1994

15-APR-1994

15-APR-1994

15-APR-1994

16-UIL-1994

16-AUG-1994

17-AUG-1994

17-AUG-1994

19-AUG-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

21-CCT-1994

07-CCT-1994

07-CCT-1994

01-OCT-1994

11-OCT-1994

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene expression; downregulation; interleukin-5; IL-5; ICAM-intercellular adhesion molecule; rel A; tumour necrosis fact TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncoge translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restemosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syn
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9523225-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleic acid; ribozyme; trans cleavage;
94US-00291932
94US-00291433
94US-00293520
94US-00293520
94US-0030000
94US-00311486
94US-00311749
94US-00316771
94US-00316771
94US-00316771
94US-00316771
94US-00317608
94US-00337516
94US-00357577
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94US-00357577
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94US-00218934.
94US-0022795.
94US-00224483.
94US-00227958.
94US-00227958.
94US-00245736.
94US-00245736.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inhibition;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          86).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AIDS;
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(RIBO-) RIBOZYME PHARM INC.

Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW; Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA; Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD; Tracz D, Usman N, Wincott FB, Woolf T;

WPI; 1995-351090/45.

Ribozymes having modified bases and methods for producing them - for us in inhibiting disease related genes.

Claim 2; Page 222; 407pp; English.

The present sequence represents a preferred target sequence for an enzymatic nuclect acid (i.e. a ribozyme) which cleaves interleukin-5 (II-5) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the II-5 target sequences and thereby inhibit II-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of II-5 in lymphocytes

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RESULT 204
AAT54732
ID AAT547
XX AAT547
XX AAT547
XX Enzyme
C Enzyme
XX Homo
XX Homo
XX Enzyme
X
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Best Local Similarity
Matches 13; Conserv
                                                                   23-FEB-1994

29-MAR-1994

04-APR-1994

15-APR-1994

15-APR-1994

15-APR-1994

15-APR-1994

16-JUL-1994

16-JUL-1994

17-AUG-1994

17-AUG-1994

19-AUG-1994

19-AUG-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

23-SEP-1994

04-NCV-1994

04-NCV-1994

04-NCV-1994

04-NCV-1994
  28-NOV-1994;
16-DEC-1994;
23-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IC-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atheroselerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndron
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22-APR-1997
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1 UGGAGCUGCCUACGUGUA 18
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(first entry)
  94US-00227958
94US-00228041
94US-00271280
94US-00271280
94US-00291433
94US-00292620
94US-0030000
94US-00300303
94US-00311486
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94US-00316771
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94US-0031673
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94US-00224483.
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1.3e+02;
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Query Match
Best Local S
Matches 11
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Grimm S, K
Modak A, P
Tracz D, U
                                                                                                                    The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-enzymatic nucleic base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat eosinophila (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated eosinophilia ayndrome. (Updated on 25-MAR-2003 to correct PI
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                                                                      Sequence 18
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                                                                                                             field.)
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                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RIBOZYME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DT, Chowrira B, Direnzo A, Draper KG, Dudycz Karpeisky A, Kisich K, Matulic-Adamic J, Mcswi(Ravco P, Beigleman L, Sullivan SM, Sweedler D, Usman N, Wincott FE, Woolf T;
                                                                      вp;
     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95US-00380734.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PHARM INC
                                                                      Α;
                    0.6%;
                                                                      σ
                                                                      C; 3
7;
   Score 18; DB
Pred. No. 1.3e
7; Mismatches
                                                                      G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                             methods
                    1.3e+02;
                                      DB 1;
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   <u>.</u>
                                      Length 18
     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dudycz LW;
Mcswiggen JA;
   <u>.</u>
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     Gaps
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                                                                                                                                            atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV;
                                                                                                                                                                                      gene expression; downregulation; interleukin-5; IL-5; ICAM intercellular adhesion molecule; rel A; tumour necrosis fa TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; onco translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease;
                                                                                                                                                                                                                                                               Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
                                                                                                                                                                                                                                                                                              Human IL-5
                                                                                                                                                                                                                                                                                                                           25-MAR-2003
22-APR-1997
                                                                                                                                                                                                                                                                                                                                                                    AAT54733;
                                                                                                                                                                                                                                                                                                                                                                                                 AAT54733 standard; RNA; 18
                                                        WO9523225-A2
                                                                                    Homo sapiens
                                                                                                                                human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   653 receperacion con 670
                                                                                                                                immunodeficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 UGGCACUGCUUUCUACUC
                                                                                                                                                                                                                                                                                            hammerhead ribozyme target sequence (nt. position 172).
                                                                                                                                                                                                                                                                                                                         (revised)
(first entry)
                                                                                                                                virus; acquired
                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18
                                                                                                                                immune deficiency syndrome; AIDS;
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31-AUG-1995

23-FEB-1995;

95WO-IB000156

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                                                                                          Query Match
Best Local S:
                                                                          Matches
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06-JJU-1994
15-AUG-1994
17-AUG-1994
19-AUG-1994
19-AUG-1994
02-SEP-1994
02-SEP-1994
23-SEP-1994
23-SEP-1994
23-SEP-1994
03-OCT-1994
01-OCT-1994
04-NOV-1994
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29-MAR-1994,
04-APR-1994,
07-APR-1994,
15-APR-1994,
15-APR-1994,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stinchcomb
Grimm S, K
Modak A, P
                                                                                                                                                                                                 The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat eosinophila (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated escinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI entropy the result of the correct PI entropy the result of the correct PI entropy the correct properties and properties a
                                                                                                                                                Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ribozymes having modified bases and methods for producing in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim
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                                   674 GAACTCTGCTGATAGCCA 691
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Page 222; 407pp; English.
                                                                          l Similarity
14; Conserv
   \vdash
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b DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson
Usman N, Wincott FE, Woolf T;
                                                                                                                                                BP;
                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94US-00201109.
94US-00218934.
94US-00227956.
94US-002279483.
94US-002279483.
94US-002279483.
94US-00227949.
94US-00291320.
94US-00291320.
94US-00291320.
94US-0030000.
94US-0030000.
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94US-00311749.
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94US-003163737.
94US-00337608.
94US-00337608.
94US-00337608.
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77.8%;
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                                                                                                                                                C; 4 G; 0 T; 4 U; 0 Other;
   18
                                                                        4;
                                                                                            Score 18; DB 1;
Pred. No. 1.3e+02;
                                                                          Mismatches
                                                                          0;
                                                                                                             Length 18;
                                                                          Indels
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                                                                          Gaps
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RESULT 206 AAT76222/c ID AAT762 XX

AAT76222 standard; DNA;

18

19-DEC-1996. WO9640162-A1

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RESULT 207
AAT76220/c
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Best Local Simi
Matches 18;
                                                                                                                                                                                                                                                                                                                                                                                                         A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMIL5AS3 specific for the human IL5. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyperreactive airways
                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 0 A; 1 C; 3 G; 14 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 5; Page 31; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nyce JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Asthma; airway epith chronic obstructive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human IL5 antisense oligonucleotide HUMIL5AS3
                                                               Synthetic.
                                                                                        Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleukin;
                                                                                                                             Human IL5 antisense oligonucleotide HUMIL5AS1.
                                                                                                                                                        12-SEP-1997
                                                                                                                                                                                                             AAT76220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 subject.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                           1643 AGAAAACAAACAAAAAAC 1660
                                                                                                                                                                                                                                                                             18
                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Metzger WJ;
                                                                                                                                                                                                             standard;
                                                                                                                                                                                                                                                                             AGAAAACAAACAAAAAAC 1
                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  epithelium; adenosine free; cystic fibrosis;
ctive pulmonary disease; bronchitis; interleukin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95US-00474497.
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                                                                                                                                                                                                                                                                                                                                           0.6%;
                                                                                                                                                                                                           DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                                                                                                                                        entry)
                                                                                                                                                                                                                                                                                                                           0;
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Pred. No. 1.3e+02;
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                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                  Indels
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RESULT 208
AAX54018/c
ID AAX540
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Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine induced bronchoconstriction in patients with hyperreactive airways
                                                                                                                                                                                                                                                       impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis; pulmonary vasoconstriction; inflammation; allergic asthma; asthma; alsthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMILSAS1 specific for the human IL5. The method can be used to treat airway specific for the human IL5. The method can be used to treat airway specific for the human IL5.
                                             17-SEP-1997;
09-JUN-1998;
                                                                                                                                                                                                                                            colon cancer; breast cancer; lung cancer; pancreatic cancer;
hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAXS4018 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 18 BP; 0 A;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-JUN-1996;
                                                                                               17-SEP-1998;
                                                                                                                                                                                                                              prostate
                                                                                                                                                                                                                                                                                                                                                                           Antisense oligonucleotide; multiple target; antisense treatment;
                                                                                                                                                                                                                                                                                                                                                                                                          Human IL-5 antisense oligonucleotide fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                            05-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    мусе JW,
                (UYEC-) UNIV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGGGGGGAAACAGGGA 342
                                                                                                                                                                                                                              cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGGGGGAAACAGGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Metzger WJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31; 71pp;
                                             97US-0059160P
98US-00093972
                                                                                               98WO-US019419.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9 C; 1 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded respiration, respiratory pulmonary vasoconstriction, impeded respiration, respiratory pulmonary vasoconstriction, expirates by pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, melanoma, hepatic metastases, a well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer
                                                                                                                                                                                                                                                                                                                         non-coding regions of RNAs corresponding to target genes, gene initiation codons, genemic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antiense oligonucleotides may be derived from sequences ANX55272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nyce
Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 49; 120pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides used in treatment vasoconstriction.
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BP; 0 A; 1 C; 3 G; 14 T; 0 U; 0 Other;
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                                                                                                                                                   e.g.
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Query Match Best Local S Matches 18 1643 AGAAAACAAACAAAAAAC 1660 18 AGAAAACAAACAAAAAAC 1 18; Similarity Conservative 0.6%; 0, Score 18; DB 1; L Pred. No. 1.3e+02; Mismatches 0 Length Indels 0 Gaps

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RESULT 209 AAX54016/c 05-JUL-1999 AAX54016; AAX54016 standard; DNA; 18 Human IL-5 antisense oligonucleotide fragment. (first ₽P

Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis; acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; brast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis; 17-SEP-1997; 09-JUN-1998; Synthetic 17-SEP-1998; 25-MAR-1999 prostate cancer; WO9913886-A1 97US-0059160P 98US-00093972 98WO-US019419 88.

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RESULT 210
AAA33462/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and conon-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 3' codons, genomic flanking regions, intron-exon borders, the 3' conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX55272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of consecuted with impaired respiration and inflammation, including lung codiseases and conditions. Typical diseases and conditions are those codiseases, pulmonary vasoconstriction, inflammation, allergic rhinitis, accurte asthma, allergies, asthma, impeded respiration, respiratory codistress syndrome, pain, cystic fibrosis, pulmonary hypertension, codisease (CPP), and cancers suphysema, chronic obstructive pulmonary colon cancer, breast cancer, lung cancer, melanoma, hepatic metastases, as well as all types of cancers which may metastasize or have metastasized content including heart and reservance contents including heart and reservance cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                            phosphorothicate; impaired respiration; inframmat.v., phosphorothicate; impaired respiration; inhibitor; antiinflammatory; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distrees syndrome; pain; cystic fibrosis; emphysema; respiratory distrees syndrome; pain; cystic fibrosis; emphysema; nulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 49; 120pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothicate; impaired respiration; inflammation; allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA33462 standard; DNA; 18
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                                                                  03-AUG-1998;
                                                                                                                                 03-AUG-1999;
                                                                                                                                                                                                                                                                              WO200009525-A2
                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Low adenosine antisense oligonucleotide SEQ ID NO:1151.
(UYEC-) UNIV EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18 AAAGGGGGAAACAGGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGGGGGGAAACAGGGA 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 0 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                including breast and prostate cancer
                                                                  98US-0095212P
                                                                                                                                        99WO-US017712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C; 1 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 18;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.3e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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CC oligonucleotide (ON) with low adenosine (up to 15%), which targets concleic acids involved in bronchoconstriction, allergies, and/or confidential involved in the compositions are consisted in the treatment of diseases activities. The compositions are consisted airways, including lung diseases and diseases whose secondary confidential including confidential confidential including confidential confidential including confidential confidentia
                                                                                                             nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA3392) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nyce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention describes a new composition comprising an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  409; 1343pp; English
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밁 Query Match Best Local S Matches 18 1643 AGAAAACAAACAAAAAAC 1660 18 Similarity AGAAAACAAACAAAAAAAC 1 Conservative 100.0%; =-0.6%; Score 18; DB; Pred. No. 1.3 1.3e+02; hes 0; DB 1; Length 18; Indels 0 Gaps

0

Sequence 18

BP; 0

P

1 C; 3 G; 14 T; 0

U; 0 Other;

AAA33460 standard; DNA; 18 28-JUL-2000 BP.

(first entry)

RESULT 211
AAA33460/c
ID AAA334
XX
AC AAA34
XX
DT 28-JUL
XX
DT 28-JUL
XX
DT 28-JUL
XX
Unman;
KW Human;
KW Human;
KW Jhospb
KW allarg;
KW allarg;
KW allarg;
KW allarg;
KW respil
KW Jung c
KW respil
KW Jung c
KW Inng c Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergy; disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; canogr: lumbrame. Low adenosine antisense oligonucleotide SEQ ID NO:1149. leukaemia; lymphoma; carcinoma;

Homo sapiens

WO200009525-A2

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RESULT 212
AAF19582/c
                                                                                                                                                                                                                                                                                                                                                                                                  밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                inflammation. The ON can have antiinflammatory, antitallergic,
cantiagehmatic, cytostatic and analgesic activities. The compositions are
useful for the treatment of diseases associated with inflammation,
cimpaired airways, including lung diseases and diseases whose secondary
effects afflict the lungs of a subject. They can be used for treating
e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
impeded respiration, respiratory distress syndrome, pain, cystic
fibrosis, pulmonary hypertension, emphysema, chronic obstructive
pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
carcinomas, and cancers which may metastasise to the lungs, including
breast and prostate cancer. The reduction of the adenosine content of the
construction and inflammation. ANA32311 represent the
purclease of deoxyadenosine which activates adenosine receptors causing
bronchoconstriction and inflammation. ANA32311 represent the
          Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA33992) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in broncheconstriction, allergies, and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                    14-MAR-2001
                                                                                                                                                                                                                                                                                                 AAF19582 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-AUG-1999;
                                                                                                                                                                             Human ILS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-205971/18
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                                                                                                                                                                                                                                                                                                                                                                                                                                         325
                                                                                                                                                                                                                                                                                                                                                                                                  18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                  AAAGGGGGAAACAGGGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAGGGGGAAACAGGGA 342
                                                                                                                                                                           polynucleotide fragment #1149.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Page 408; 1343pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EAST CAROLINA
                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0095212P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9 C; 1 G; 8 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 18; DB; Pred. No. 1.3
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U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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AAF19584/ ID AAF1

AAF19584 standard;

DNA; 18

RESULT 213

밁 S

18

325 AAAGGGGGGAAACAGGGA 342

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AAF19584;

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cc expression and or activity of target polypeptides associated with activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and communoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adenosine receptors, bradykinin receptors, cytokine and comervous system (CNS) and peripheral nervous and non-nervous system receptors, bradykinin receptors, contral nervous and non-nervous system peptide cransmitters, defensins, growth factors, vasoactive peptides and receptors, binding proteins and malignancy associated proteins. The artisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or condition selected from pulmonary vasoconstriction, inflammation, condition, selected from pulmonary vasoconstriction, inflammation, inflammation, condition, selected from pulmonary vasoconstriction, inflammation, pulmonary disease or condition, emphysema, chronic obstructive pulmonary disease (COPD), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), condition and antisense oligonucleotides used in the exemplification of the protein and antisense oligonucleotides used in the exemplification of
                     Query Match
Best Local
  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                oligonuclectides and compositions (I) comprising them. In the antis oligonuclectides the A is replaced by a 'Universal' or alternative (I) can have respiratory, bronchodilator, antiinflammatory, analyse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunosuppressive, antiasthmatic, hypotensive and cytostatic activities the antisense oligonucleotides and (I) can be used to down-regulate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chronic obstructive pulmonary disease; cancer; ss.
                                                                                Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes low adenosine (A) content antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 14; Page 208; 1592pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and respiratory obstructions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-679539/66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nyce JW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-MAR-2000; 2000WO-US008020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYEC-) UNIV EAST CAROLINA. (NYCE/) NYCE J W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200062736-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
  18;
                       Similarity
                                                                                BP; 0
                                                                                                                          invention
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0127958P
                                                                                A;
                     100.0%;
                                                                                9 C; 1 G; 8 T; 0 U; 0 Other;
                                        0.6%;
  <u>.</u>
                       Score 18;
Pred. No.
    Mismatches
                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pulmonary infection; bronchitis;
                       1.3e+02;
                                        Length 18;
    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      analgesic,
  <u>..</u>
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         base
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Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; pulmonary impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; pulmonary hypertension; emphysema; pulmonary transplantation rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200062736-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 polynucleotide fragment #1151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first
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Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions. WPI; 2000-679539/66.

06-APR-1999;

99US-0127958P

(UYEC-) UNIV EAST CAROLINA. (NYCE/) NYCE J W.

24-MAR-2000; 2000WO-US008020

Claim 14; Page 208; 1592pp; English.

CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.

CC The antisense oligonucleotides and (I) can be used to down-regulate the cc expression and or activity of target polypeptides associated with activity disorders and malignancies, such as stimulating and cativating peptide factors and transmitters, transcription factors, communoglobulins and antibodies, antibody receptors, cytokines and cc immunoglobulins and antibodies, antibody receptors, cytokines and communoglobulins and entropy and proteins and specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and common expressions system exceptors, adhesion molecules and their receptors, cytokine and creceptors, cytokine and creceptors, cytokine and construction system peptide creceptors, binding proteins and malignancy associated proteins system creceptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or lung inflammation, allergy(ies) and/or sunfactant hypoproduction which are associated with a disease or condition selected from pulmonary vascocnstriction, inflammation, condition, cond oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analyssic, The present invention describes low adenosine invention (A) content antisense ing them. In the antisense

Sequence 18 BP; 0 A; 1 C; 3 G; 14 T; 0 U; 0 Other;

Query Match Best Local S Matches 18 al Similarity 18; Conserv 0.6%; ilarity 100.0%; Conservative Score 18; DB; Pred. No. 1.3 0 DB 1; Le Length 18 Indels 0

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RESULT 214
ABX03869
 문문원
                            The invention relates to a differential display comprising contacting C cDNA with a first primer that hybridises to an oligonucleic sequence coding for a leucine-rich motif, and with a second oligonucleotide primer to form a cDNA-hybrid molecule. The method comprises obtaining mRNA from at least 2 samples, synthesising cDNA from the RNA of each sample, contacting the cDNA with a first primer that hybridises to an oligonucleotide primer coding for a leucine-rich motif, and with a second oligonucleotide primer to form cDNA-hybrid molecules, amplifying the cDNA chybrid molecules, detecting amplified products and comparing the amplified products from each sample to identify distinctive amplified products coding for at least one secreted or transmembrane proteins which are important for cell processes and play an important role in determining its phenotype, and which act as mediators for the transfer of signals from external environment into the cell itself, thus modulating gene expression. Sequences ABX03792-ABX03869 represent DNA contents of the contents of the protein signal peptide sequences
                                                                                                                                                                                                                                                                                                                                                                                                                             Differential display method for identifying secreted or transmembrane protein, comprises contacting a DNA with a first primer that hybridize to a sequence coding for a leucine-rich motif and with a second
                                                                                                                                                                                                                                                                                                                                                                                                              oligonucleotide primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-599769/64.
P-PSDB; ABG98398.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Differential display method; leucine-rich motif; transmembrane secreted protein; secreted protein signal peptide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA encoding secreted protein signal peptide sequence #78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABX03869;
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Sequence 18
                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Fig 2; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-JAN-2002; 2002WO-IL000071.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200259259-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYRA-) UNIV RAMOT APPLIED RES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard; cDNA; 18
BP; 3 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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protein;

hybridizes

밁 S

 \mathbf{L}

AGTTTGCTAGCTCTTGGA 18

Query Match Best Local S Matches 18

Similarity

0.6%;

Score 18; Pred. No.

DB 1; L 1.3e+02; 0

Length 18; Indels

18;

Conservative

0,

Mismatches

0;

Gaps

0

AGTTTGCTAGCTCTTGGA 591

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ABZ95278/c
IID ABZ952
XX
AC ABZ952
XX
AC ABZ952
XX
AC ABZ952
XX
AC ABZ952
AC ABZ962
AC
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Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at the print of the printed and the print of the printed and the print of the printed at the print of the printed and the pri
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                                                                                                                                                                                                                                                                                                                 Sequence 18
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Miller S,
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                                                                                                                                                                                                         Sequence 18
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                                                                                                           Similarity
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Tang L, Shahabuddin S;
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                                                        CC comprising oligonucleotides, effective for alleviating
CC treducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC expression of a target polypeptide associated with lung airway or lung
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or-availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC inflammation, allergies and/or bronchoconstriction and/or lung
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC thymidines present in the target RNA serves to prevent the breakdown of
CC thymidines present in the target RNA serves to prevent the breakdown of
CC thymidines present in the target RNA serves to prevent the breakdown of
CC constrait any unwanted effects due to it
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
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respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; Human; antisense; pulmonary transplantation bronchoconstriction; allergy; hyposecretion; pain;

Homo sapiens.

WO200285309-A2

23-APR-2002; 2002WO-US013143

24-APR-2001; 2001US-0286036P

(EPIG-) EPIGENESIS PHARM INC

Miller Мусе JW, Li Y, Tang Sandrasagra A, L, Shahabuddin s Katz E, Pabalan ŗ Aguilar D;

Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targ nucleic acids associated with lung airway or lung dysfunction bronchodilating agent. dysfunction, targeted ូ

Claim 15; SEQ ID NO 10520; 763pp; English

CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
Deta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung This invention describes a novel composition (a) a first active agent,

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                                                                                              The present sequence is the human interleukin-5 (hIL-5) promoter mutant palindromic regulatory element (PRE1-4), which inhibits the activity of the hIL-5 promoter and therefore IL-5 expression. PRE1-4 can be used to modulate IL-5 activity by acting on the corresponding region of the hIL-promoter, especially in cases of asthma and eosinophila or in immunocompromised subjects. PRE1-4 specifically inhibits transcription from the IL-5 promoter, as no such sequence is present in genes encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleic acid sequence that inhibits activity of the interleukin-5 promoter - and proteins that interact with this sequence to modulate IL-5 gene expression, for treating asthma, eosinophilia or immune-compromised
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Query Match Best Local Similarity

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                                                                                                                                                                                                                                                                                                                                                        administered to the patient by intranasal gene transfer. It is useful f treating respiratory viral infections, especially respiratory syncytial virus (RSV). The composition of the invention may be administered to an
                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence was used to analyse the mRNA expression of mouse interleukin-5 (IL-5) in an example illustrating an invention relating to a gene therapy composition for the prevention of respiratory infections. The composition comprises DNA encoding interferon (IFN) gamma and may be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New gene therapy composition useful infections, particularly RSV.
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                                                                                                                                                                                                                                                                                                                                                   The invention relates to short interfering nucleic acids (siNA) which CC downregulate expression of the human G72 gene by RNA interference. The SiNAs may or may not comprise ribonucleotides and may be double or single CC stranded. They further comprise sense and antisense regions, or CC alternatively are assembled from a sense oligonucleotide and an antisense CC oligonucleotide. Specifically, the siNAs include short interfering RNA CC (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA CC (shRNA). The siNAs can be unmodified or chemically modified, can contain CC (shRNA). The siNAs can be unmodified or chemically modified, can contain CC (shRNA) in vitro or in vivo delivery of siNA; conjugates and/or complexes CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes CC for siNA; and vectors that express siNA. The siNAs are used to modulate coff siNA; conjugates and/or complexes CC of siNA; and vectors that express siNA. The siNAs are used to modulate CC by ex vivo gene therapy), or in grafts and transplants for the treatment CC of a variety of conditions. The human G72 siNAs have neuroleptic activity and can be used for treating schizophrenia. The siNAs are also useful for conflictions of the capture of conditions of the capture of conditions of the capture of c
                                                                                                    Query Match
Best Local S
Matches 12
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06-JUN-2002; 2002US-0386782P.
29-AUG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0409293P.
05-DEC-2002; 2002US-0411105P.
15-JAN-2003; 2003US-0440129P.
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                                                                                                                                                                                                                                                         validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the lower strand of a human G72-targeted double-stranded siNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens.
                                                   253
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                                                                                                                            Similarity
                                                                                                                                                                                                           19
  AUUUUAAGAAAUGAAAAUG 19
                                                ATTTTAAGAAATGCAAATG 271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       interfering nucleic acid, useful e.g. for treatment and of schizophrenia, downregulates expression of the G72 g
                                                                                                                                                                                                      вP;
                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Beigelman L,
                                                                                                                                                                                                         10
                                                                                                                                                                                                      A; 0 C; 3 G; 0 T; 6 U; 0 Other;
                                                                                                                       0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Haeberli P;
                                                                                                    <u>ه</u>
                                                                                                 Score 17.4; DB 1; Length 19; Pred. No. 1.5e+02; Indels
                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene
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RESULT 222 ADG64562/c

Query Match Best Local S

19

σ A:

w o ()

G; 0 T;

10 U; 0 Other;

Similarity 18; Conserv

Conservative

0

0.5%;

Score 17.4; Pred. No. 1.

1.5e+02

0

Gaps

0

DB 1; Length 19; Indels

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The invention relates to short interfering nucleic acids (siNA) which CC downregulate expression of the human G72 gene by RNA interference. The CC siNAs may or may not comprise ribonucleotides and may be double or single CC stranded. They further comprise sense and antisense regions, or CC alternatively are assembled from a sense oligonucleotide and an antisense CC oligonucleotide. Specifically, the siNAs include short interfering RNA CC (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA CC (shRNA). The siNAs can be unmodified or chemically modified, can contain CC debxyribonucleotides, and can be chemically mynthesised, expressed from a CC vector or enzymatically synthesised. The invention also relates to kits CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes CC of siNA; and vectors that express siNA. The siNAs are used to modulate CC expression of the G72 gene in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment CC and can be used for treating schizophrenia. The siNAs are also useful for CC drug screening, diagnosis, therapeutic target identification and CC validation, genetic engineering, pharmacogenomics, studying gene CC function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of a human G72-targeted. CC double-stranded siNA, which is identical to the G72 transcript target.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-FEB-2002;
11-MAR-2002;
06-JUN-2002;
29-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RNA interference; short interfering nucleic acid; siNA; miRNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short interfering RNA; skRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; neuroleptic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-SEP-2002;
09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-FEB-2003; 2003WO-US004397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003070743-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            schizophrenia; human; G72; target sequence; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human G72 siNA oligonucleotide SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADG64562 standard; RNA; 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3; SEQ ID NO 8; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            interfering nucleic acid, useful e.g. for treatment and of schizophrenia, downregulates expression of the G72 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; 2002US-0408378P.
; 2002US-0409293P.
; 2002US-0431105P.
; 2003US-0440129P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
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RESULT 223
AAA1196
XX AA1196
XX AAA1196
AC AAAA1196
AC AAAA1196
AC AAAA1196
AC AAAA1196
AC AAAA1196
AC AAAA1196
AC AAAAA1196
AC AAAAA1196
AC AA
AAQ57189
ID AAQ5
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AC AAQ5
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DT 25-N
DT 26-J
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                                                                                                                                                                                                                                                                                                  밁
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                                                                                                                                                                                                                          RESULT 224
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Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence was used to analyse the mRNA expression of mouse interleukin-5 (IL-5) in an example illustrating an invention relating to a gene therapy composition for the prevention of respiratory infections. The composition comprises DNA encoding interferon (IFN)-gamma and may be administered to the patient by intranasal gene transfer. It is useful for treating respiratory viral infections, especially respiratory syncytial virus (RSV). The composition of the invention may be administered to an infant or other immunosuppressed individuals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New gene therapy composition useful infections, particularly RSV.
     Enzymatic RNA
                                                  25-MAR-2003
26-JUL-1994
                                                                                                                            AAQ57189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 8; 20pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUL-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2001006951-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       respiratory infection IL-5; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mouse; IFN-gamma; interferon-gamma; respiratory infection; respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mouse IL-5 PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAH19613
                                                                                                                                                                          AAQ57189 standard; mRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mohapatra SS, Matsuse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MATS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-FEB-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MOHA/) MOHAPATRA S S.
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                                                                                                                                                                                                                                                                                                                                                                                                18;
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KUMAR M.
                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MATSUSE H.
                                                                                                                                                                                                                                                                                                                                   AGGATGCTTCTGCATTTGA 574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTTTAAGAAATGCAAATG
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                                                                                                                                                                                                                                                                                                  AGGATGCTTCTGCACTTGA
                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
molecule IL-5 mRNA target sequence.
                                                  (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0075588P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-00259411
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                                                                                                                                                                                                                                                                                                                                                                                                                    94.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                           0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ξ
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                                                                                                                                                                                                                                                                                                                                                                                                                       Pred.
                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                           3 1/.4,
No. 1.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; antiviral; gene therapy; vaccine;
syncytial virus; RSV; interleukin-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      in the prophylaxis of respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kumar M;
                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                Indels
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PRX PRX NOS OS X KW X DE X X C
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                                                                                                                                                                                                                                                                 RESULT 225
                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUL-1992;
07-DEC-1992;
07-DEC-1992;
07-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                     This is an II-5 mRNA target sequence (nucleotide no. 10) of an enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a psoriatic or asthmatic condition. The concur. of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of action is higher. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Interleukin-5; specific; cleavage; target RNA; protein; expression;
inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention;
psociasis; asthma; inflammatory diseases; restenosis;
                                                                                                                              Human; interleukin-5; IL-5; palindromic regulatory element; inhibition; modulation; asthma; eosinophilia; mutant; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Enzymatic RNA molecules which cleave mRNA - used to treat or inflammatory, arthritic, stenotic or cardiovascular diseases
                       14-MAR-1997;
                                                                                            Homo sapiens
Synthetic.
                                                                                                                                                                                            27-MAR-1998
                                                                                                                                                                                                                    AAV01430;
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 3; Page 16; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-JUL-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-FEB-1994.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cardiovascular
                                               18-SEP-1997
                                                                                                                                                                   IL-5 promoter mutant palindromic regulatory element,
                                                                                                                                                                                                                                          AAV01430 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1994-048853/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-JAN-1993;
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                                                                       WO9733990-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inflammatory,
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                                                                                                                                                                                                                                                                                                                            518
                                                                                                                                                                                                                                                                                                    μ
                                                                                                                                                                                                                                                                                                                                                              Similarity
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92US-00987132.
92US-00989848.
92US-00989849.
93US-00008895.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           condition; hypertension; arthritis; ss.
                       97WO-AU000162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93WO-US006316
                                                                                                                                                                                                                                                                                                                                                                                                 A; 5 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                              0.5%;
                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                      17
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                                                                                                                                                                                                                                                                                                                                                                           Score 17;
                                                                                                                                                                                                                                                                                                                                                               Pred. No.
                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                            DB 1;
                                                                                                                                                                                                                                                                                                                                                               1.4e+02;
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0;

15-MAR-1996;

96AU-00008691

(TVWT-) TVW TELETHON INST CHILD

HEALTH RES

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RESULT 226
AAC73663/c
ID AAC736
XX AAC736
XX MUXINE
AC AAC736
XX MUXINE
XX MOUSE;
KW MIL-5 x
KW IL-5 x
KW IL-5 x
KW IL-5 x
KW IL-5 x
XX MUS MUS
OS MUS MUS
OS SYNTHE
XX II-MAR
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XX ANTISE
PT SYNDAX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence is the human interleukin-5 (hII-5) promoter mutant palindromic regulatory element (PRE1-3), which inhibits the activity of the hII-5 promoter and therefore II-5 expression. PRE1-3 can be used to modulate II-5 activity by acting on the corresponding region of the hII-5 promoter, especially in cases of asthma and eosinophilia or in immunocompromised subjects. PRE1-3 specifically inhibits transcription from the II-5 promoter, as no such sequence is present in genes encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nucleic acid sequence that inhibits activity of the interleukin-5 promoter - and proteins that interact with this sequence to modulate IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1997-470871/43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mouse; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Murine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAC73663 standard;
                                                                                                                                                                                                                                                                                                                                                                                 26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                       17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200058512-A1
                                                                                                                                                                                                                       WPI; 2000-594648/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 receptor-alpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     416 ATGCCATTATTAGGCAT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IL-5
                                                                                                                                                                                                                                                                                                                              ISIS PHARM INC
                                                                                                                                  oligonucleotide compound used to treat asthma and eosinophilic in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                          Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 6 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antisense oligonucleotide ISIS #16989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cancer;
                                                                                                                                                                                                                                                                                                                                                                                   9908-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mordvinov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ptide; antiasthmatic;
asthma; eosinophilic
                                                                                                                                                                                                                                                                        Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 17;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        eosinophilia or immune-compromised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunosuppressive; cytostatic;
syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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The present sequence is an oligonucleotide used for antisense of interleukin-5 (IL-5) signal transduction. Oligonucleotides

modulation were

Example 2; Page 48; 156pp; English.

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RESULT 227
ABXO4317/c
ID ABXO43
XX ABXO43
XX ADSO43
AC ABXO43
XX MOUSE;
KW MOUSE;
KW immunc
XX Mus mn
XX Mus mn
XX IMMUNC
PN US2002
XX Mus mn
XX US2002
XX Mus mn
XX HOT-MAI
PR 26-MAI
PR 26-MAI
PR 26-MAI
PR 17-MAI
XX UDEAN,
PA (MCKA,
PA 
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The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (IL)-5 signal transduction. Also CC include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form CC versus soluble form of IL-5 receptor a. The antisense compound is useful CC for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian CC in cells or tissues, for altering the ratio of the isoforms of mammalian CC having a disease or condition associated with IL-5 signal transduction, CC IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2002128216-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 prevent or delay infection, inflammation or tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAR-1999; 99US-00280799.
17-MAR-2000; 2000WO-US007318.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mouse; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mouse Interleukin 5 antisense oligonucleotide ISIS 16989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 10; Page 14; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MANO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DEAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .mmunosuppressant;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEAN N M.
KARRAS J G.
MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MANOHARAN M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACGGCCAAAAAGTAAGTTAC 2020
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCGCCAAAAAGTAAGTTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     eosinophilic syndrome; asthma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mckay R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.7e+02;
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RESULT 228
ABZ89011/c
        SXS
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The invention relates to a novel pharmaceutical composition, which has a cliret active agent comprising an oligonucleotide antisense to the cinitiation codon, coding region, 5' or and genomic flanking regions, 5' or and attive agent comprising an oligonucleotide antisense to the composition codon, coding region, 5' or and genomic flanking regions, 5' or and attive composition and a second active agent comprising an compassion of genes encoding a polypeptide associated with lung and/or compassion and a second active agent comprising an antisinflammatory servoid and ubiquinone. A composition of the invention composition and the invention composition may have a composition may have a cuse in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also composition gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also composition as abject, to reducing or depleting levels of antiinflammatory steroid in a subject, for reducing levels of adenosine receptor, producing bronchodilation, increasing levels of adenosine or colling inflammation, lung allergies, or a respiratory disease or condition. CC lung inflammation, lung allergies, or a respiratory disease or condition. CC specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18
                                                                                                                                                                                                                                                                                                                                                                                                     Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human oligonucleotide sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABZ89011 standard;
                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 4253; 872pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-APR-2001; 2001US-0286137P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200285308-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (EPIG-)
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Tang
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Pred. No. 1.7e+02
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This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung alivay or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antianflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antialflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
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Pred. No. 1
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specifically hybridizes with and inhibits the expression of Navi.3. The compound and composition are useful for treating a disease or condition associated with Navi.3, e.g. pain including but not limited to neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain, pain from burns, migraine headache, cluster headache, mild-to-moderate headache, seizure disorder such as childhood seizure disorder, including but not limited to neonatal or infantile epilepsy; or ataxia. The present sequence represents a chimeric phosphorothioate oligonucleotide with
                                                                                                                                                                                                                                                                                                                                                                              Claim 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                       with Nav1.3, e.g. pain, disorder, or ataxia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense compound targeted to a nucleic acid molecule encoding Nav1.3, useful for useful for treating a disease or condition associated with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
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                                                                                                                                                                                                                                                                                 The present invention relates to an antisense compound targeted to a nucleic acid molecule encoding Nav1.3, where the antisense compound
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                                                                                                                                                                                                                                                                                                                                                                              417pp; English.
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Pred. No. 1
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Best Local Similarity
                         The present invention relates to an antisense compound targeted to a nucleic acid molecule encoding Navl.3, where the antisense compound specifically hybridizes with and inhibits the expression of Navl.3. The compound and composition are useful for treating a disease or condition associated with Navl.3, e.g. pain including but not limited to neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain, diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain, pain from burns, migraine headache, cluster headache, mild-to-moderate headache; seizure disorder such as childhood seizure disorder, including but not limited to neonatal or infantile epilepsy, or ataxia. The present sequence represents a chimeric phosphorothioate oligonucleotide with 2°MOE wings and a deoxy gap. Used during the antisense inhibition of human Navl.3 expression, the oligonucleotides are designed to target different regions of the human Navl.3 RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2'MOE wings and a deoxy gap. Used during the antisense inhibition of human Navl.3 expression, the oligonucleotides are designed to target different regions of the human Navl.3 RNA.
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                                                                                                                                                                                                                                                                              Claim 4; SEQ ID NO 6643; 417pp; English
                                                                                                                                                                                                                                                                                                           New antisense compound targeted to a nucleic acid molecule encoding Nav1.3, useful for useful for treating a disease or condition associated with Nav1.3, e.g. pain, seizure disorder such as childhood seizure disorder, or ataxia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-AUG-2002; 2002US-0403416P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-AUG-2003; 2003WO-US025465.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nav1.3; Analgesic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chimeric phosphorothioate oligonucleotide to target Nav1.3 #6643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAY-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                             Roberds
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              (PHAA)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       arthritic pain; migraine headache;
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Pred. No. 1
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                                        The invention relates to an antisense compound that modulates interleukin CC -5 (IL-5) signal transduction. The antisense compound is an antisense CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian CC IL-5 or IL-5 receptor a, where the antisense compound modulates the CC expression of mammalian IL-5 or IL-5 receptor a. The antisense compound modulates the CC oligonucleotide comprises at least one modified internucleoside linkage, i.e. a 2'-0-methoxyethyl sugar molety, and at least one modified sugar molety, i.e. a 2'-0-methoxyethyl sugar molety, and at CC least one modified nucleobase, i.e. 5-methylytosine. Altering the ratio CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues comprises contacting the cells or tissues with an antisense CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is altered. Treating a mammal having a disease or condition sasociated with CIL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a CC disease or condition characterised by a reduction in apoptosis comprises CC administering to the mammal a therapeutic or prophylactic amount of an antisense compound so that IL-5 signal transduction, IL-5 or IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IL-5 receptor a; phosphorothioate; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; IL-5 signal transduction; apoptosis; eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Murine interleukin-5 (IL-5) DNA antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense compound modulating useful in promoting apoptosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-OCT-2003; 2003US-00679532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mouse; interleukin-5; IL-5; вв; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2021 ACACATTCAATGGAAGCTAT 2040
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2000WO-US007318
2001US-00800629
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     interleukin-5 signal transduction in treating eosinophilic syndrome
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                                                                                                                                                       primer A800 and SATG (AAV32486) were used in the method of the invention to determine the prevelance of cDNA clones with a 114 bp deletion in the human retinaldehyde binding protein HRGR1-2 cDNA (AAV32476). The HRGR1-7 cDNA (AAV32477) of clone HRGR1-7, isolated from a human lambda-gt10 retinal library, was found to contain the deleted region which corresponded to the nucleotide sequence of exon 6 (AAV32483) of the human retinaldehyde binding protein gene. The human retinal and all-trans protein HRGR1-2 (AAW48858) binds both 11-cis-retinal and all-trans retinal. The invention claims that molecular aberration of the visual system can be detected in binding seasys by observing any changes in the binding of the retinaldehyde binding protein HRGR1-2 to its chromophores. The retinaldehyde binding protein hrgr1-2 can also be used to raise antibodies, which in turn can be used to detect changes of the protein in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human retinaldehyde binding protein HRGR1-2; retinal pigment epithelium; 11-cis-retinal; all-trans retinal; visual system; binding assay; chromophore; PCR; primer; amplification; ss.
                                                                                                                                                                                                                                                                                                                                                                                              Human and bovine retin-aldehyde-binding proteins - used to detect aberration(s) of retinal binding in visual excitation systems.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human retinaldehyde binding protein HRGR1-2 cDNA primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-SEP-1998
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                                                                                                                Sequence 20
                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Col 23; 39pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-DEC-1994;
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                      2974 GCAGATCATCATTGCC
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                                                      Conservative
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                                                                                                                A; 8 C; 3 G; 4 T; 0 U; 0 Other;
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Pred. No. 1.7e+02;
0; Mismatches 2
                                                                      Score 16.4;
Pred. No. 1
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                                                                       1.7e+02
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                                                                                                                                                                                                                                                                                                                                                                                                      AAX91991-X97517 represent PCR primers used to amplify open reading frames and other nucleic acid sequences from the genome of Chlamydia pneumoniae (see AAX91990). C. pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema nodosum or pharyngitis. The polypeptides encoded by the open reading frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used in immunogenic compositions as vaccines. Vectors containing C. pneumoniae nucleotides sequences can also be used as immunogenic compositions, especially where the vector directs the expression of a neutralising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis; sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine; neutralising epitope; PCR primer; ss.
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                                                                                                                                                                                AAZS$851 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                    Sequence 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCR primer used to amplify an ORF of Chlamydia pneumoniae
                          Homo sapiens
                                                   Retinaldehyde binding protein; rgr gene; all-trans retinal; chromophore; photoreceptor; G protein-coupled receptor; human; PCR primer; ss.
                                                                                            Human retinaldehyde binding protein cDNA PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Page 1804; Disclosure; 1912pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-NOV-1997;
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                                                                                                                           10-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GEST ) GENSET
                                                                                                                                                                                                                                                                      2936 TGTAACTAGGTTCCTGCC 2953
                                                                                                                                                                                                                                                      18 TGCAACTAGGTTCCTGCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                  BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                              pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97FR-00014673
98US-0107078P
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                                                                                                                                                                                                                                                                                                                        Score 16.4;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                        DB 1; Length 20; .7e+02;
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RESULT 236
ABZ93890/c
ID ABZ938
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Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to mammalian retinaldehyde binding proteins and nucleotides encoding them. Retinaldehyde binding protein is the first light-absorbing vertebrate protein identified to stably and preferentially bind the all-trans-retinal chromophore. Retinaldehyde binding proteins have distant homology to other G protein-coupled receptors, possessing seven transmembrane domains. The nucleic acid and encoded protein are useful for assaying changes in the structure or the retinaldehyde-binding proteins which would be indicative of a molecular aberration in the retinal pigment epithelium, visual system or brain. The nucleic acid is also useful in antisense therapeutics and in the recombinant expression of retinaldehyde-binding protein. Sequences ARZ55848-Z55848 represent probes or PCR primers used in exemplifications
                                                                                                                                                                                                                     Human; antisense; lung dysfunction; nasal airway dysfunction; antiallergic; antiallargy steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                17-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fong
                                                                                                                                                                                                                                                                                                                  Human oligonucleotide sequence
                                                                                                                                                                                                                                                                                                                                                                                                            ABZ93890 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 16; Col 23-24; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-DEC-1999.
                                                          24-APR-2001; 2001US-0286137P
                                                                                      23-APR-2002;
                                                                                                                    31-OCT-2002
                                                                                                                                                WO200285308-A2
                                                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                                                              ABZ93890;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 binding protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Isolated nucleic acid molecule encoding a photoreceptive retinaldehyde-
pinding protein for use in antisense therapeutics.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (FONG/) FONG
                            (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2974 GCAGATCATCTCATTGCC 2991
                                                                                                                                                                                                          inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGACCATCTCATTGCC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                      2002WO-US013135
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                                                                                                                                                                                                                                                                                                                                                                                                            DNA;
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                                                                                                                                                                                                          respiratory disease; ds.
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Pred. No. 1
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L.7e+02;
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Nусе JW,

Li Y,

Sandrasagra A,

Katz E,

Pabalan J,

Aguilar D;

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RESULT 237
ABD30120/c
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergd; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta adrenergic agonist; respiratory disease; pulmonary vasoconstrictio; respiratory disease; pulmonary hypotensione analgesic rhinitis; pulmonary hypotension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABD30120 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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                                                                                                                                                                                                                              31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                pulmonary transplantation rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA677534-derived oligonucleotide SEQ ID 9132.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-JUL-2004
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(EPIG-)
                                                                  24-APR-2001; 2001US-0286036P
                                                                                                                                            23-APR-2002; 2002WO-US013143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               366 TAAATTTATTTTTAAGA 383
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EPIGENESIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 11 A; 0 C; 0 G; 9 T; 0 U; 0 Other;
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Pred. No. 1.7e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pulmonary hypertension;
cancer; bronchitis;
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Nyce JW,
Miller S,
                                                                                       Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and
                                   Claim 15; SEQ ID NO 9132; 763pp; English
                                                                                                                                                               WPI; 2003-093058/08
 This invention
                                                                      bronchodilating agent.
                                                                                                                                                                                               Li Y,
Tang
 describes
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                                                                                                                                                                                                  Sandrasagra A,
L, Shahabuddin
   ø
novel composition
                                                                                                                                                                                                  Katz E,
                                                                                                                                                                                                                    Pabalan J,
   (a)
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comprising oligonucleotides, effective for alleviating composition (a) a first active agent, ccomprising oligonucleotides, effective for alleviating pronchoconstriction, respiratory tract inflammation, allergies and creducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, comparison of a target polyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating continuous or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery constructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, considered in the invention has antiallergic, antiinflammatory, antiasthmatic, considered adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the amount of target polypoptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung confilammation, allergies and/or bronchoconstriction and/or lung confilammation, allergies, asthma, impeded respiratory, respiratory confilammation, allergies, asthma, impeded respiratory responding to the reduced adenosine content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system content any unwanted effects due to it unwanted effects due to first active agent,

20 BP; 11 A; 0 C; 0 G; 9 T; 0 U; 0 Other;

밁 Ş Query Match Best Local S Matches 17 366 TAAATTTATTTTTTAAGA 383 20 TAAATTTATTTTTAAAA 3 Similarity Conservative 0.5%; 0 Score 16.4; Pred. No. 1 Mismatches .7e+02 DB 1; Length Indels 0 Gaps 0

Search completed: December 14, 2004, 16:05:39
Job time : 9 secs

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Maximum
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Maximum Match 100%
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Match
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 GenCore version (c) 1993 - 2004
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I29342
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ACCESSION: AF080304
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ACCESSION: AR089936
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ACCESSION: AR250439
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ACCESSION: AR309657
ACCESSION: I39774
ACCESSION: AX643972
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ACCESSION: AX644889
ACCESSION: AR552260
ACCESSION: AR003065
ACCESSION: AR0030303
ACCESSION: B0129707
ACCESSION: B09217
ACCESSION: E09217
ACCESSION: E09217
ACCESSION: I39767
 ACCESSION: ARO4 8336
ACCESSION: ARO79227
ACCESSION: ARA79658
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ACCESSION: AX63576

ACCESSION: AX635770

ACCESSION: AX635777

ACCESSION: BD066879

ACCESSION: BD066880

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                                                                                                          Unclassified.

Unclassified.

1 (bases 1 to 50)

Edwards, C.A., Cantor, C.R., Andrews, B.M. and Turin, L.M.

Screening assay for the detection of DNA-binding molecules

Patent: US 5726014-A 214 10-MAR-1998;

Location/Qualifiers
                                                                                                                                                                                                                                         Sequence
191016
191016.1
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1 (bases 1 to 50)

Edwards, C.A., Cantor, C.R., Andrews, B.M., Sequence-directed DNA-binding molecules of Patent: US 5578444-A 214 26-NOV-1996;
Location/Qualifiers
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129342
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Patent: US 5869241-A 214 09-FEB-1999;
Location/Qualifiers
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/mol_type="unassigned
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/mol_type="unassigned
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ACCESSION:BD247710 ACCESSION:BD247711 ACCESSION:BD247712

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ACCESSION: BD247723 ACCESSION: AX801571 ACCESSION: AX805803

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AR032602
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AUTHORS
        Unknown.
Unclassified.
1 (bases 1 to 5
Edwards, C.A., Ca
                                                          Sequence 214
AR032602
AR032602.1
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                                           Unknown
                                                                            214 from
                                                            GI:5948207
          Cantor, C.R.,
                   50)
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          Andrews, B.M.,
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          Turin, L.M.
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           and
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          Fry, K.E
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105454
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Edwards, C.A., Cantor, C.R., Andrews, B.M.,
Sequence directed DNA binding molecules of Patent: US 6384208-A 214 07-MAY-2002;
Location/Qualifiers
                   1 (bases 1 to 47)
Nicholson,D.
Method of purification of recombinant human interleukin-5
Patent: US 5681936-A 2 28-OCT-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                   Similarity 47; Conserv
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Coffman,R., Yokota,T., Crute,J.J., Lee,F. and Arai,K.-i.
Human pleiotropic immune factor and muteins thereof
Patent: EP 0267779-A2 6 18-MAY-1988;
Location/Qualifiers
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                                                  ### 1998 US 60/087306

PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DREITZ, RAMANI S WONDERLING |
C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395,
PC A61K3/395, A61K48/00, A61P37/02, A61P37/04, C07K14/475, C07K14/535
PC C07K14/54,
PC C07K14/56, C07K14/705, C07K16/24, C07K16/28, C12N1/21, C12N5/10

G01N33/15, C12N15/10
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Canine and feline immunoregulatory
and method of using the same.
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Nicholson, D.
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77
                                       PC G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5/00
Description of Artificial Sequence: Synthetic Primer I
                                                                                                                                                                                                                                                            Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R. Canine and feline immunoregulatory proteins, n and method of using the same Patent: JP 2002516104-A 107 04-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Method of purification of recombinant Patent: US 5681936-A 3 28-OCT-1997; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.
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                                                                                                                                                                                                                                                                                                                    artificial sequences.

1 (bases 1 to 42)
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                                                                                  A61K45/00,A61K48/00,A61P37/02,A61P37/04,C07K14/475,C07K14/535,
C07K14/54,
C07K14/56,C07K14/705,C07K16/24,C07K16/28,C12N1/21,C12N5/10, PC
                                                                                                                                                                                                  Artificial Sequence
JP 2002516104-A/107
04-JUN-2002
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llarity 100.0%;
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                         Location/Qualifiers
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/mol_type="unassigned DNA"
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Pred. No. 4.4;
organism='Artificial Sequence'.
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                                                                                                       Unclassified.

1 (bases 1 to 42)

1 (bases 1 to 42)

Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.

Caniney III-13 immunoregulatory proteins and uses thereof

Patent: US 6482403-A 135 19-NOV-2002;

Location/Qualifiers
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 42
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Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 135 29-OCT-2002;
Location/Qualifiers
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AR241579
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ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG
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|llarity 95.2%;
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                                                                                        /organism="unknown"
/mol_type="genomic DNA"
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/mol_type="genomic |
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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                                           Score 41.2; DB Pred. No. 7.5; 2; Mismatches
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2; Mismatches
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RESULT 11 I39775

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139775
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Method of purification of recombinant Patent: US 5681936-A 4 28-OCT-1997;
Location/Qualifiers
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34; Conserv
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Sullivan,S.M. and Draper,K.G.
Ribozymes targeted to TNF-.alpha. RN
Patent: US 5616499-A 48 01-APR-1997;
Location/Qualifiers
                                                                                            Unknown
                              Nicholson,D.

Nicholson,D.

Nethod of purification of recombinant Patent: US 5681936-A 1 28-OCT-1997;

Location/Qualifiers
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/mol_type="unassigned
         organism="unknown"
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/mol_type="unassigned
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mol_type="unassigned
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                                                                                        2184 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 2216
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AR080304
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TREATMENT OF PAPILLOMAVIRUS-ASSOCIATED LESIONS USING INTERLEUKIN-12
PATENT: WO 9629091-A 12 26-SEP-1996;
UNIV CAMBRIDGE TECH (GB)
Other publication AU 5151596 961008.
Location/Qualifiers
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A56954.1
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139778 33 bp | Sequence 51 from patent US 5616490.
                                                                                                                                                                                                                                              1 (bases 1 to 33)
Roederer, M., Rabin, R., Herzenberg, L.A. and Methods for determining T-cell profiles of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unidentified unidentified
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Sequence 12 from Patent WO9629091.
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                                                                                                                        larity 100.0%; P Conservative 0;
                                                                                                                                                                                                            US 5968755-A 10 19-OCT-1999;
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unidentified"
/mol_type="unassigned DNA"
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/mol_type="unassigned DNA"
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SUNTORY LTD, SUNTORY BIOMEDICAL RESEARCH LTD, HIROSHI NAKAZATO
OS Artificial Sequence
PN WO 0250268-A/5
PD 27-JUN-2002
PF 18-DEC-2001 WO 2001JP011113
PR 19-DEC-2000 JP 00P 386025
PI HIROSHI NAKAZATO
PC C12N15/10,C12Q1/68,C12M1/00
CC Hf
EH Key
FT Source
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FT Source
/organism='Artificial Sequence'.
                                                                                                                                         1600 ACTTTTTGAAAATTTTTATCTTAATATGTGG 1629
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1 (bases 1 to 30)

Nakazato, H.
                        Sequence
139780
139780.1
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I39778.1
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1 (bases 1 to 33)
Sullivan, S.M. and Draper, K.G.
Sullivan, S.M. and Draper, R.G.
Ribozymes targeted to TNF-.alpha. RN.
Patent: US 5616490-A 51 01-APR-1997;
Location/Qualifiers
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Method of gene enrichment.
BD170558
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WO 0250268-A/5.
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                                                                                                                                                                                                                                                                        /organism='Artificial Sequence'.
Location/Qualifiers
                                                                                                                                                                                                                          /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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                                                from patent US
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GI:2084260

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AR089936/c
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AR196971/c
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                                                                                                                                                                                                                                                                                                                                                                                                             M Unknown.

Unclassified.

1 (Dases 1 to 28)

2 1 (Chanchik, A., Jokhadze, G. and Bibilashvilli, R. S. Chenchik, A., Jokhadze, G. and Bibilashvilli, R. Methods of assaying differential expression AL Patent: US 5994076-A 56 30-NOV-1999; Location/Qualifiers

Location/Qualifiers
              1912
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Sequence 56
AR196971
AR196971.1
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AR089936
AR089936.1
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                                                                                                         Chenchik, A., Jokhadze, G. and Bibilashvilli, R. Methods of assaying differential expression Patent: US 6352829-A 56 05-MAR-2002; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unclassified.
1 (bases 1 to 29)
Sullivan, S.M. and Draper, K.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ribozymes targeted to TNF-.alpha. RNA
Patent: US 5616490-A 53 01-APR-1997;
Location/Qualifiers
                                                                                                                                                          Unclassified.

1 (bases 1 to 28)
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/mol_type="unassigned DNA"
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AR259125
AR259125.1
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AX083943
 Guo, H.,
Methods
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AR300439
                                                     Canis familiaris (dog)
Canis familiaris
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1 (bases 1 to 28)

Guo,H., Lawton,R., Mermer,B. and Aiyappa,A.

Methods and compositions concerning canine

Patent: US 6537781-A 5 25-MAR-2003;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 28)
Chenchik, A., Jokhadze, G. and Bibilashvilli, R.
Methods of assaying differential expression
Patent: US 6489455-A 56 03-DEC-2002;
                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae;
                                                                                                                        AX083943
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                                                                                                                                               Sullivan, S.M. and Draper, K.G. Ribozymes targeted to TNF-.alpha. RN Patent: US 5616499-A 41 01-APR-1997;
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/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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/mol_type="unassigned DNA"
/db_xref="taxon:9615"
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                                             /mol_type="unassigned DNA"
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Patent: WO 0250268-A 6 27-JUN-2002;
SUNTORY LTD, SUNTORY BIOMEDICAL RESEARCH LTD, HIROSHI NAKAZATO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            synthetic construct
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1 (bases 1 to 27)
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WO 0250268-A/6.
                                                                                                     Stordeur, P. and Goldman, M. Method to quantify in vivo rna levels Patent: EP 1329506-A 9 23-JUL-2003; Cypro S.A. (BE)
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18-DEC-2001 WO 2001JP011113
19-DEC-2000 JP 00P 386025
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  /note="N = 6Fam"
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Location/Qualifiers
                                              /organism="synthetic construct"
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                                   /note="Oligonucleotide"
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Method to determine in vivo nucleic acid levels
Patent: WO 03060119-A 9 24-JUL-2003;
Universite Libre de Bruxelles (BE)
Location/Qualifiers
                                                                                                                                   1 (bases 1 to 26)
Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
Methods of assaying differential expression
Patent: US 5994076-A 55 30-NOV-1999;
Location/Qualifiers
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Sequence 9 from Patent WO03060119.
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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/mol_type="unassigno
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                                                                                              _type="unassigned DNA"
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AR196970.1
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Sequence
AR259124
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Chenchik, A., Jokhadze, G. and Bibilashvilli, R.
Methods of assaying differential expression
Patent: US 6352829-A 55 05-MAR-2002;
Location/Qualifiers
                                                                                        Canine and feline immunoregulatory and method of using the same.
BD211602.
BD211602.1 GI:33021372
BD202516104-A/108.
                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 26)
Chenchik, A., Jokhadze, G. and Bibilashvilli, R.
Methods of assaying differential expression
Patent: US 6489455-A 55 03-DEC-2002;
Location/Qualifiers
artificial sequences.

1 (bases 1 to 27)
Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R. Canine and feline immunoregulatory proteins, n and method of using the same Patent: JP 2002516104-A 108 04-JUN-2002;
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AR241580/c
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AR254536/c
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OS Artificial Sequence
PN JP 2002516104-A/108
PD 04-JUN-2002
PF 28-MAY-1999 JP 2000551002
PF 29-MAY-1998 US 60/0875106
PI GEKKEE SIM, SHUMIN YANG, MATTHEW J DRBITZ, RAMANI S WONDERLING
C12N15/09, A61K31/7088, A61K38/00, A61K38/21, A61K39/00, A61K39/395,
PC A61K39/395
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AR241580
Unclassified.
1 (bases 1 to 27)
5im,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
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                                                                                                      Sequence 136 from patent AR254536
                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 27)
Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
Canine IL-4 immunoregulatory proteins and uses thereof
Patent: US 6471957-A 136 29-OCT-2002;
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Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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/mol_type="genomic DNA"
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Sequence
A39731
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A86923
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                                                                          1 (bases 1 to 24)
Dolganov,G.
TRANSCRIPTS ENCODING IMMUNOMODULATORY
Patent: WO 9838306-A 14 03-SEP-1998,
GENELABS TECH INC (US)
                                                                                                                                        unidentified unclassified.
                                                                                                                                                                                                                                                                                             1 GCTTCTGCATTTGAGTTTGCTAGCT
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Other publication CA 2155109 940818
Location/Qualifiers
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                                                                                                                                                                   unidentified
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                                                                                                                                                                                                                 14 from Patent WO9838306
                                                                                                                                                                                                                                                                                                                                                                                            /organism="unidentified"
/mol_type="unassigned DN
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/db_xref="taxon:32644"
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                                                              Location/Qualifiers
                                                                                                                                                                                          GI:6735707
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from Patent W09417773.
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100.0%; Pred. No. 51
ive 0; Mismatches
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Pred. No. 52;
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Marchant, A.,
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RESULT 39
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AR079226
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Sequence 14
AR048335
                                 Sequence 14
AR309657
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Sequence 14 from
AR079226
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Dolganov,G. and Novikov,A.
Human RAD50 gene and methods of use thereof
Patent: US 5965427-A 14 12-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Method of identifying activated T-cells Patent: US 5821091-A 14 13-OCT-1998; Location/Qualifiers
                                                                                                                                                                                                                                                                                                      Unknown
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                       AR309657.1
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                                                                                                                                                                     Similarity
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                                                                                                                                                                                                 /organism="unknown"
/mol_type="unassigned DNA"
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/mol_type="unassigned DNA"
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AX643972/c
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Sequence
139774
                                                                                                           Brown, D. and Winkler, M.M.
Competitive population normalization
nucleic acid samples
Patent: WO 02061140-A 10 08-AUG-2002;
AMBION, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                       23;
                                                                                                                                                                                                synthetic construct synthetic construct
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Sequence 10 from Patent WO02061140.
AX643972
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Sullivan, S.M. and Draper, K.G.
Ribozymes targeted to TNF-.alpha. RN
Patent: US 5616490-A 47 01-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
Unclassified
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Dolganov, G.
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                                                                                                                                                                                      artificial sequences.
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Similarity 100.0%; Pred. No. 63
23; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="unknown"
/mol_type="genomic DNA"
                                              /organism="synthetic construct"
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/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
/mol_type="unassigned DNA"
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                                    /note="Synthetic Primer"
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SOURCE
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AX003065
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AX644889/c
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AR252260
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Sequence 13 :
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AX003065.1 (
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AX644889
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23; Conserv
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Eagles, P.A.M. and Zheng, R.Q.
Inhibition of cytokine production
Patent: US 6476214-A 13 05-NOV-2002;
Location/Qualifiers
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Competitive amplification of fractionated targets from multiple
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                                AX003065
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                                                                                   CGACCCTGCCAAGGCTTGGCAGTT
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llarity 95.8%;
Conservative
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llarity 100.0%;
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WO 02061145-A 10 08-AUG-2002;
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                                                                                                                                                                /organism="unknown"
/mol_type="genomic DNA"
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="Synthetic Primer"
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from Patent WO02061145.
                     from Patent
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                                                                                                                          Score 22.4; D; Pred. No. 79; O; Mismatches
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Pred. No. 63;
                     27 bp
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                               24-AUG-2000
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BD129707
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Best Local 9
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synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 27)
Eagles, P.A.M. and Zheng, R.Q.
Eagles, P.A.M. and Zheng, R.Q.
Engles, P.A.M. and Zheng, R.Q.
Eagles, P.A.M. and Zheng, R.Q.
Eagles, P.A.M. and Zheng, R.Q.
Eagles, P.A.M. 2002;
BTG INTERNATIONAL LTD
OS Artificial Sequence
PN JP 2002500883-A/13
PD 15-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23;
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               31 CGACCCTGCCAAGGCTTGGCATTT 54
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Inhibition of cytokine production
Patent: WO 993760.A 13 29-JUL-1999;
EAGLES PETER ANTHONY MINTER (GB); ZHENG RICHARD QIHAO
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
artificial sequences.
1 CGACCCTGCCAAGGCTTGGCAGTT 24
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                                                                                                                                                                                                                                                           PC A61P29/00,A61P43/00//A61K38/00,C12N15/00,A61K37/02 CC Description of Artificial Sequence: Oligomer containing CC
                                                                                                                                                                                                                                                                                                      PF 20-JAN-1999 JP 2000528668
PR 22-JAN-1998 GB 9801391.5,11-NOV-1998 GB 9824794.3 I
PETER ANTHONY MINTER EAGLES,RICHARD QIHAO ZHENG PC
C12N15/09,A61K9/127,A61K31/711,A61K35/76,A61K48/00,A61P11/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JP 2002500883-A/13.
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                                                                      Similarity
                                                                                                                                                                                                                                               palindromic
                                                                                                                                                                                                                sequence from human IL-5
Key Location/
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                                                        Conservative
                                                                                                                                                                                                      source
                                                                                                                                                                    /organism='Artificial
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Oligomer containing palindromic sequence
                                                                                                             /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Location/Qualifiers
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Pred. No. 79;
                                                                    Score 22.4;
Pred. No. 79;
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RESULT 46 AR080303

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(bases 1 to 22)
dosokawa,T. and Akitaya,T.
PRIMER FOR DETECTING AND MEASURING SPEC
__L Patent: JP 1995123984-A 16 16-MAY-199'
HITACHI CHEM CO LTD
OS None
OC Artificial sequences.
PN JP 19523984-A/16
PD 16-MAY-1995
PF 05-NOV-1993 JP 10'
PI HOSOKAWA TOSHI'
PC C12N15/09,C)'
CC strandedn'
CC topolor'
FH Key
FT
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Best Local Similarity
Matches 22; Conserv
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1 (bases 1 to 22)

Roederer, M., Rabin, R., Herzenberg, L.A. and Herzenberg, L.A. Methods for determining T-cell profiles of immunocompromised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 9 from patent US AR080303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: US 5968755-A 9 19-OCT-1999;
Location/Qualifiers
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                                                           Similarity
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             GAAATTCCCACAAGTGCATTGG 640
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GAAATTCCCACAAGTGCATTGG
                                                                                                                                                             HUMIL5'
                                                                                                                                                                                                                                           Artificial sequences.
JP 1995123984-A/16
16-MAY-1995
05-NOV-1993 JP 1993275852
HOSOKAWA TOSHIAKI, AKITAYA TATSUO
C12N15/09,C12Q1/68;
strandedness: Single;
                                            0.7%; Score 22; DB 1; larity 100.0%; Pred. No. 70; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                      /organism='Artificial sequences'
                                                                                            /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="unknown"
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                                                                                                                                                                                  Unknown.
Unknown.
                                                                                                                                                                                                                              Sequence
I39767
                                                                                                                             1 (bases 1 to 22)
Sullivan, S.M. and Draper, K.G.
Ribozymes targeted to TNF-.alpha. RN
Patent: US 5616490-A 40 01-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 22)
HOBOKAWA, T. and Akitaya, T.
PRIMER FOR DETECTING AND MEASURING SPECIFIC MESSENGER
PATENT: JP 195123984-A 17 16-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unidentified
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JP 1995123984-A/17.
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Primer for detecting and
E09218
                                                                                                                                                                         Unclassified.
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             CGTTTCAGAGCCATGAGGATGC 562
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JP 1995123984-A/17
16-MAY-1995
05-NOV-1993 JP 1993275852
HOSOKAWA TOSHIAKI, AKITAYA TATSUO
C12N15/09,C12Q1/68;
strandedness: Single;
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                                       0.7%; So
larity 100.0%; I
Conservative 0;
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/note='complementary to No.2139-No.2160 of FT
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                                                                                                                                                                                                                                                                                                                                                                                           /organism="unidentified"
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/db_xref="taxon;32644"
                                                                                /organism="unknown"
/mol_type="unassigned
                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                    GI:2084247
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100.0%; Pr
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Pred. No.
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A86924/c
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139771
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TREATMENT OF PAPTILLOWAVIRUS-ASSOCIATED
PATENT: WO 9629091-A 11 26-SEP-1996;
UNIV CAMBRIDGE TECH (GB)
Other publication AU 5151596 961008.
Location/Qualifiers
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Sequence 11 from Patent W09629091
A56953
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Sullivan,S.M. and Draper,K.G.
Ribozymes targeted to TNF-.alpha. RNA
Patent: US 5616490-A 44 01-APR-1997;
Location/Qualifiers
    Dolganov,G.
TRANSCRIPTS ENCODING IMMUNOMODULATORY POLYPEPTIDES
PATENT: WO 9838306-A 15 03-SEP-1998;
                                                                 unidentified unidentified
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/mol_type="unassigned DNJ
/db_xref="taxon:32644"
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AR079227
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Dolganov,G. and Novikov,A.
Human RAD50 gene and methods of use thereof
Patent: US 5965427-A 15 12-CCT-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                 Dolganov.G.
Method of identifying activated T-cells
Patent: US 5821091-A 15 13-OCT-1998;
Location/Qualifiers
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                                                                                  /organism="unknown"
/mol_type="unassigned DNA"
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/isolate="PRIMER IL4-2"
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/mol_type="unassigned DNA"
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Sequence 9 from Patent WO02061140.
AX643971 GI:28551855
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Unclassified.
1 (bases 1 to 21)
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Sequence 15 from patent US
AR309658
AR309658.1 GI:31701735
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Brown, D. and Winkler, M.M.
Competitive population normalization nucleic acid samples
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Competitive population normalization
nucleic acid samples
Patent: WO 02061140-A 9 08-AUG-2002;
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/mol_type="unassigned DNA"
/db xrefs"taxon:32630"
/noTe="Synthetic Primer"
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/mol_type="genomic DNA"
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Sequence 9 from Patent WO02061145.
AX644888
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                                                                         Winkler, M.M. and Brown, D.

Competitive amplification of fractionated targets nucleic acid samples
Patent: WO 02061145-A 23 08-AUG-2002;
                                                                                                                                                                                                              Sequence 23 from Patent AX644902
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/note="Synthetic Primer"
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Sequence 8 from Patent W003060119.
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AX805804.1 GI:38522715
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Cypro S.A.
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Sequence 8 from Patent BP1329506.
AX801572 38500544
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: US 6136603-A 39 24-OCT-2000;
Location/Qualifiers
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AR136238
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Dean, M., Karras, J.G. and McKay, R.
Dean, M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5 signal transduction
Patent: US 6136603-A 40 24-OCT-2000;
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Dean,N.M., Karras,J.G. and McKay,R.
Dean,N.M., modulation of interleukin-5
Patent: US 6136603-A 41 24-OCT-2000;
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: US 6136603-A 42 24-OCT-2000;
Location/Qualifiers
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Dean,N.M., Karras,J.G. and McKay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: US 6136603-A 43 24-OCT-2000;
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larity 100.0%; Pred. No.
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/mol_type="unassigned DNA"
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AR136243/c
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Sequence 46
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 44 24-OCT-2000;
Location/Qualifiers
                                                                                                                 1 (bases 1 to 20)
Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 46 24-OCT-2000;
Location/Qualifiers
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 45 24-OCT-2000;
Location/Qualifiers
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Similarity 100.0%; Pred. No. 86
20; Conservative 0; Mismatches
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Similarity 100.0%; 1
20; Conservative 0;
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/mol_type="unassigned
                                   Score 20; DB; Pred. No. 86; 0; Mismatches
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AR136246/c
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AR136244
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Sequence
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 48 24-OCT-2000;
Location/Qualifiers
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AR136245
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 47 24-OCT-2000;
Location/Qualifiers
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1 (bases 1 to 20)
Dean, N., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 49 24-OCT-2000;
                                          Unknown.
Unclassified.
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/mol_type="unassigned DNA"
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/mol_type="unassigned
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AR136248/c
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AR136248.1
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Sequence
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1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 50 24-OCT-2000;
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 51 24-OCT-2000;
Location/Qualifiers
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RESULT 77
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Sequence 53
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AR136249
AR136249.
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5 signal
Patent: US 6136603-A.53 24-CCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 20)
Dean, N.M., Karras, J.G. and McKay, R.
Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5 signal
Patent: US 6136603-A 52 24-OCT-2000;
Location/Qualifiers
                                                                   1 (bases 1 to 20)
Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5 signal
Patent: US 6136603-A 54 24-OCT-2000;
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AR136253/c
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AR136254/c
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AR136252/c
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Sequence 57
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 56 24-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                       Unknown
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 55 24-OCT-2000;
Location/Qualifiers
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AR136256/c
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 57 24-OCT-2000;
Location/Qualifiers
                                                                                                                l (bases 1 to 20)
Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 59 24-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 20)
Dean, N.M., Karras, J.G. and McKay, R.
Antieense modulation of interleukin-5
Patent: US 6136603-A 58 24-OCT-2000;
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Sequence 58 from patent
AR136255
AR136255.1 GI:14476927
                                          . Similarity 20; Conserv
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/mol_type="unassione
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/mol_type="unassigne
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AR136258/c
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AR136257/c
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 60 24-OCT-2000;
Location/Qualifiers
1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 62 24-OCT-2000;
Location/Qualifiers
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Dean,N.M., Karras,J.G. and McKay,R.
Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 61 24-OCT-2000;
Location/Qualifiers
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AR136261/c
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l (bases 1 to 20)

Dean, N.M., Karras, J.G. and McKay, R.

Antisense modulation of interleukin-5

Patent: US 6136603-A 64 24-OCT-2000;

Location/Qualifiers
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Sequence
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 63 24-OCT-2000;
Location/Qualifiers
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/organism="unknown"
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/mol_type="unassigned DNA"
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AR136264/c
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AR136263/c
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AR136263
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 67 24-OCT-2000;
Location/Qualifiers
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Dean, N., Karras, J.G. and McKay, R.
Antieense modulation of interleukin-5
Patent: US 6136603-A 66 24-OCT-2000;
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/mol_type="unassigned
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AR136265/c
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AR136267/c
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                                        AR136267
Sequence 70
AR136267
AR136267.1
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Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 69 24-OCT-2000;
Location/Qualifiers
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Sequence 69 from patent
AR136266
AR136266.1 GI:14476938
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 68 24-OCT-2000;
Location/Qualifiers
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Sequence 68 from patent
AR136265
AR136265.1 GI:14476937
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llarity 100.0%; F
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/mol_type="unassigned DNA"
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Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 70 24-OCT-2000;
                                                                                                                                                                 synthetic construct synthetic construct
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Dean, N., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 71 24-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
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         A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
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larity 100.0%;
Conservative
source
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/mol_type="unassigned
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BD247692/c
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artificial sequences.

E 1 (bases 1 to 20)

E 1 (bases 1 to 20)

RS Dean, N.M., Karras, J.G. and Mckay, R.
Antisense modulation of interleukin-5 signal transduction
Antisense modulation of interleukin-5 signal transduction
Antisense modulation of interleukin-5 signal transduction
Antisense modulation of interleukin-2002;

ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/40

PD 26-NOV-2002
PP 17-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PR 26-MAR-1999 US 09/280799
PR 26-MAR-2000 JP 2000608790
PR 26-MAR-2000
PR 26-MA
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synthetic construct
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artificial sequences.

1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and Mckay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 41 26-NOV-2002;
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Antisense modulation of interleukin-5 signal transduction.
BD247693
BD247693.1 GI:33057463
JP 2002539846-A/41.
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Location/Qualifiers
1. .20
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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/db_xref="taxon:32630"
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100.0%; Pre
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SOURCE
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ACCESSION
VERSION
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BD247694/c
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Best Local S
Matches 20
                                                Best Loc
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                                                                                                                                         source
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                                                                                                                                                                                                                                       artificial sequences.

1 (Dases 1 to 20)

1 (Dases 1 to 20)

2 Dean,N.M., Karras,J.G. and Mckay,R.

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 42 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/42
PD 26-NOV-2002
PP 17-MAR-2000 JP 2000608790
PP 17-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PI NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
PO 1818/1/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
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20
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                                                20;
                                                                                                                                                                  BD247694
Antisense modulation of
BD247694
BD247694.1 GI:33057464
                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct synthetic construct
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                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                    GCCAATGAGGTAATTTTCTT 707
                                                                                                                                                                        AGIP43/00,
AGIP43/00,C12N5/02,C12N15/00
AGIP43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-MAR-2000 JP 2000608790
16-MAR-1999 US 09/280799
SICHMAR-1999 US 09/280799
NICHCLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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JP 2002539846-A/41
26-NOV-2002
                                                Conservative
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Description of Artificial Se
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                                                                                                                                                 /organism='Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism='Artificial Sequence'
                                                                                              /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                         0.6%; 5c.
100.0%; Pr
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100.0%; Pred. No. 86
tive 0; Mismatches
                                               Score 20; DB; Pred. No. 86; 0; Mismatches
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                                                            DB 1;
86;
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RESULT

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LOCUS
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                                                                                     FEATURES
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TITLE
JOURNAL
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                                            source
                                                                                                                                                                                                                                                                                                                                                                   artificial sequences.

1 (Dases 1 to 20)

1 (Dases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 44 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/44

PD 2002539846-A/44

PD 26-NOV-2002

PF 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PI NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
PD NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
PD C 12015/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
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E 1 (bases 1 to 20)

E Dean,N.M., Karras,J.G. and Mckay,R.

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 43 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/43

PD 26-NOV-2002

PP 17-MAR-2000 JP 2000608790

PP 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 10CHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
PC C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P3

PC A61P43/00,C12N5/02,C12N15/00

PC A61P43/00,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N5/02,C12N
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BD247696
BD247696.1 GI:33057466
JP 2002539846-A/44.
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26-MAR-1999 US 09/280799
NICHOLAS M DEAN JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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                                                                                                                                                                                                          Description of Artificial Sequence:Synthetic
Key Location/Qualifiers
                                                                                                                                                                                                                                                                                               A61P43/00,C12N5/02,C12N15/00
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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organism="synthetic construct"
                                                                            ocation/Qualifiers
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100.0%; Pred. No.
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                                                                                                                         organism='Artificial Sequence'
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86;
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DEFINITION
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BD247698/c
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AUTHORS
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BD247697/c
LOCUS
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                                                                 synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 20)
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1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A, 45 26-NOV-2002;
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     S Rd
                                                                                                                                                                                                                                                                                                                              Antisense modulation of interleukin-5 signal transduction BD247698
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synthetic construct
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                                                                                                                                                                                                                                                                              JP 2002539846-A/46.
                                                                                                                                                                                                                                                                                                      BD247698.1 GI:33057468
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Artificial Sequence
JP 2002539846-A/45
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17-MAR-2000 JP 2000608790

26-MAR-1999 US 09/280799

26-MAR-1999 US 09/280799

NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY

C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
Artificial Sequence
JP 2002539846-A/46
26-NOV-2002
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Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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/db_xref="taxon:32630"
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%; Pred. No. 86;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism='Artificial Sequence'
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86;
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Licial sequences.

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BD247700/c
  DEFINITION
ACCESSION
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Best Local S
Matches 20
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
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BD247700 20 bp DNA linear PAT 17 Antisense modulation of interleukin-5 signal transduction. BD247700
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20; Conservative
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17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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26-MAR-1999 US 09/280799
NICHCLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
                                                                                                                                                                                                                                                                                               Conservative
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Description of Artificial Sequence:Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                   /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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                                                                                                                                                                                                                                                                                                                      Score 20;
Pred. No.
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86;
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                                                    PAT 17-JUL-2003
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VERSION
KEYWORDS
SOURCE
ORGANISM
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AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
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BD247701/c
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AUTHORS
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                                                                                                       FEATURES
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JOURNAL
 Query Match
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                                                                                                                                                                                                                                                                                                   synthetic construct

synthetic construct

synthetic construct

fixed synthetic construct

artificial sequences.

I (bases 1 to 20)

S Dean, M., Karras, J.G. and Mckay, R.

Dean, M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction

Antisense modulation of interleukin-5 signal transduction

I Patent: JP 2002539846-A 49 26-NOV-2002;

ISIS SHARMACEUTICALS INC

OS Artificial Sequence

PD 2002539846-A/49

PD 26.NOV-2002
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JP 2002539846-A/48.

Synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and Mckay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 48 26-NOV-2002;
ISIS PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense modulation of interleukin-5 BD247701
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A61143/00,C12N5/02,C12N15/00
A61143/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
Cocation/Qualifiers
                                                                                                                                                A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic Location/Qualifiers
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JP 2002539846-A/48
26-NOV-2002
17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
                                                                                                                                                                                                                          17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
                                                                                                                                         Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                               26-NOV-2002
                                                                                                  /organism='Artificial
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                                                   /organism="synthetic construct"
/mol_type="genomic nna"
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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                                   xref="taxon:32630"
 0.6%;
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Pred. No.
 Score
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86;
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BD247702/c
                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
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BD247703/c
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Dean, N.M., Karras, J.G. and Mckay, R.
AUTHORS
Dean, N.M., Karras, J.G. and Mckay, R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 50 26-NOV-2002;
ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/50
PD 26-NOV-2002
PP 17-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PR 17-MAR-2000 JP 2000608799
PR 26-MAR-1999 US 09/280799
PR 10CHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
PC A61P43/00, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P43/00, C12N15/02, C12N15/00
CC Description of Artificial Sequence:Symthm:
FH Key
FT source

1 Dean, N.M., Karras, ROBERT MCKAY
FH Key
FT source
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synthetic construct

SM synthetic construct
artificial sequences.

E 1 (bases 1 to 20)

E 1 (bases 1 to 20)

S Dean,N.M., Karras,J.G. and Mckay,R.
Antisense modulation of interleukin-5 signal transduction
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 51 26-NOV-2002;

ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/51
PD 26-NOV-2002
PT 2002539846-A/51
PD 26-NOV-2002
PD 26-NOV-2002
PD 26-NOV-2002
PP 300-2003 JP 2000608790
PR 26-MAR-1999 US 09/280799
PR 36-MAR-1999 US 09/280799
PR 26-MAR-1999 US 09/280799
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BD247703.
BD247703.1 GI:33057473
JP 2002539846-A/51.
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   17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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/mol_type="genomic DNA"
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Location/Qualifiers
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/db_xref="taxon:32630"
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BD247704/c
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1 (bases 1 to 20)

Dean, N.M., Karras, J.G. and Mckay, R.

Dean, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 52 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
         BD247705 20 bp DNA
Antisense modulation of interleukin-5
BD247705
BD247705.1 GI:33057475
JP 2002539846-A/53.
synthetic construct
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Antisense modulation of interleukin-5 signal transduction.
synthetic construct
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A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
Location/Qualifiers
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26-NOV-2002
17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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Description of Artificial Sequence:Synthetic
Exergian Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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Location/Qualifiers
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Best Local Similarity
Matches 20; Conserv
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1 (bases 1 to 20)

RS Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

All Patent: JP 2002539846-A 53 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence

PN JP 2002539846-A/53

PD 26-NOV-2002

PF 17-MAR-2000 JP 2000608790

PF 26-MAR-1999 US 09/280799

PR 26-MAR-1999 US 09/280799

PR 10-MAR-2000 JP 2000608790

PC 12N15/09,A61X31/711,A61X48/00,A61P11/06,A61P29/00,A61P35/00,

PC A61P43/00,C12N5/02,C12N15/00

PC A61P43/00,C12N5/02,C12N5/02,C12N5/
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1988 AAGAAATACATTGACGGCCA 2007
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17-MAR-2000 JP 2000608790
17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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ACCESSION
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ORGANISM
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BD247708/c
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BD247707/c
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                                                    artificial sequences.

I (bases 1 to 20)

E 1 (bases 1 to 20)

E 1 (bases 1 to 20)

E 20 Dean,N.M., Karras,J.G. and Mckay,R.

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 56 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/56

PN JP 2002539846-A/56

PD 26-NOV-2002

PF 17-MAR-2000 JP 200608790

PF 17-MAR-2000 JP 200608799

PR 26-MAR-1999 US 09/280799

PI NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY

PC 18145/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P1
                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002 CGGCCAAAAAGTAAGTTACA 2021
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Antisense modulation of i
BD247707
BD247707.1 GI:33057477
JP 2002539846-A/55.
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1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction
Pateent: JP 2002539846-A 55 26-NOV-2002;

ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/55
   synthetic construct
synthetic construct
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BD247708
BD247708.1 GI:33057478
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26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
 Description of Artificial 
Key Location/(
                             A61P43/00,
A61P43/00,C12N5/02,C12N15/00
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Description of Artificial Sec
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Location/Qualifiers
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/db_xref="taxon:32630"
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/mol_type="genomic DNA"
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100.0%; Pred. No.
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Artificial Sequence:Synthetic Location/Qualifiers
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interleukin-5
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A61P11/06,A61P29/00,A61P35/00,
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DEFINITION
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BD247710/c
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ORGANISM
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BD247709/c
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Best Local S
Matches 20
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                                                        ORGANISM
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Antisense modulation of i
BD247710
BD247710.1 GI:33057480
JP 2002539846-A/58.
Synthetic construct
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synthetic construct
artificial sequences.

1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 57

ISIS PHARMACEUTICALS INC
OS Artificial Sequence
ON Artificial Sequence
ON APONCOSCO
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JP 2002539846-A/57.
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artificial sequences.

1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction
                                                        synthetic construct
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26-NOV-2002
17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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100.0%; Pred. No.
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100.0%; Pred. No. 86;
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BD247711/c
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                        2186 AATGAACACCGAGTGGATAA 2205
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Dean, N.M., Karras, J.G. and Mckay, R.

Dean, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 59 26-NOV-2002;

ISIS PHARMACEUTICALS INC
OS Artificial Sequence

PM JP 2002539846-A/59

PD 26-NOV-2002
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synthetic construct
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                                                                                                                                                                                                                                                                                                                                                                                                               artificial sequences.
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Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
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26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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A61P43/00,C12N5/02,C12N15/00
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C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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26-MAR-1999 US 09/280799
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Location/Qualifiers
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/db_xref="taxon:32630"
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Location/Qualifiers
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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/mol_type="genomic DNA"
                                                 0.6%; Score 20; DB
100.0%; Pred. No. 86
Live 0; Mismatches
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100.0%; Pred. No.
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BD247713/c
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Best Local
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                                               Synthetic construct
ism synthetic construct
artificial sequences.

CE 1 (bases 1 to 20)

RS Dean,N.M., Karras,J.G. and Mckay,R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 61 26-NOV-2002;

SATTIFICALS INC
OS Artificial Sequence
PN JP 2002539846-A/61

PD 26-NOV-2002

PF 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PI NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
PC C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
PC A61P43/00,C12N5/02,C12N15/00

PC A61P43/00,C12N5/02,C12N15/00

CC Description of Artificial Sequence'.

FT source /organism='Artificial Sequence'.
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artificial sequences.

RS Dean, N.M., Karras, J.G. and Mckay, R.

RS Dean, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction

RS Dean, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction

RS Artificial Sequence

PA D102539846-A 60 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence

PN JP 2002539846-A/60

PD 26-NOV-2002

PP 17-MAR-2000 JP 2000608790

PF 17-MAR-2000 JP 2000608790

PF 26-MAR-1999 US 09/280799

PR 26-MAR-1999 US 09/280799

PR 26-MAR-1999 US 09/280799

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-3000 JP 2000608790

PR 26-MAR-2000 JP 200060877

PR 26-MAR-2000 JP 200060877

PR 26-MAR-2000 JP 2000
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Antisense modulation of interleukin-5 signal transduction.
BD247712
BD247712.1 GI:33057482
JP 2002539846-A/60.
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BD247713
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Location/Qualifiers
1. .20
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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100.0%; Pred. No.
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SOURCE
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JOURNAL
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ACCESSION
VERSION
KEYWORDS
SOURCE
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BD247715/c
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BD247714/c
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Best Local S
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SM synthetic construct

artificial sequences.

E 1 (bases 1 to 20)

E 1 (bases 1 to 20)

S Dean, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 62 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A 62

PD 26-NOV-2002
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synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 20)

Dean, N.M., Karras, J.G. and Mckay, R.
Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539946-A 63 26-NOV-2002;
ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/63
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Antisense modulation of interleukin-5
BD247714
BD247714.1 GI:33057484
                                                                                                                                                                JP 2002539846-A/63.
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A61P43/00,C12N5/02,C12N15/00
Description of Artificial Se
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26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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100.0%; Pred. No.
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RESULT 121
BD247717/c
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BD247716/c
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     DEFINITION
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TITLE
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Best Local 9
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Best Local 9
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ISIS PHA
OSIS                                                                                                                                                                                                                     509 ATGCACTTTCTTTGCCAAAG 528
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1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 64 26-NOV-2002;

ISIS PHARMACRUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/64

PD 26-NOV-2002
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BD247716.1 GI:33057486
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BD247717 20 bp DNA linear PAT 17 Antisense modulation of interleukin-5 signal transduction.
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synthetic construct
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                                                                                                                                                                                                                                                                                                  Similarity
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17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
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/db_xref="taxon:32630"
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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BD247718/c
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Synthetic construct
artificial sequences.

El (bases 1 to 20)

S Dean, N.M., Karras, J.G. and Mckay, R.
Antisense modulation of interleukin-5 signal transduction
Antisense modulation of 26-NOV-2002;
ISIS PHARMACEUTICALS INC
ON TOTAL SUBJECT OF THE TOTAL SUBJECT ON TOTAL SU
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JP 2002539846-A/65.
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26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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Description of Artificial Sequence:Synthetic
Key
Location/Qualifiers
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                                                                                    /organism='Artificial
Location/Qualifiers
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/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
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/mol_type="genomic DNA"
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Pred. No.
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Best Local Similarity
Matches 20; Conserv
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JOURNAL
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synthetic construct

synthetic construct

artificial sequences.

CE 1 (bases 1 to 20)

RS Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 68 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A/68

PD 2002539846-A/68

PD 2002539846-A/68

PD 26-NOV-2002

PF 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PI NICHOLAS M DEAN, JAMES G KARDEN CONTROL

PR 16-MAR-1999 US 09/280799

PI NICHOLAS M DEAN, JAMES G KARDEN CONTROL

Artificial Sequence
PN JP 2002539846-A/68

PD 26-MAR-1999 US 09/280799

PR 16-MAR-1999 US 09/280799
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artificial sequences.

CE 1 (bases 1 to 20)

RS Dean,N.M., Karras,J.G. and Mckay,R.
Antisense modulation of interleukin-5 signal transduction

RS Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

RS Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

RS Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

RATIFICATION

PARTICIPATION

ANTISENSE AND LEAN JOUNGE OF JOUNGE O
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BD247719.1 GI:33057489
JP 2002539846-A/67.
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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100.0%; pr
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86;
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BD247722/c
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BD247721/c
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1 (bases 1 to 20)

1 (bases 1 to 20)

2 1 (bases 1 to 20)

Antisense modulation of interleukin-5 signal transduction patent: JP 2002539846-A 69 26-NOV-2002;

ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/69
PD 26-NOV-2002
PP 17-MAR-2000 JP 2000608790
PD 26-NOV-2002
PP 17-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PI NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
PC C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
                                                                                                                                                       1873 CCTCATTTAGCACCAACTGT 1892
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         Antisense modulation of interleukin-5
BD247722
BD247722.1 GI:33057492
JP 200539846-A/70
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BD247721
BD247721.1 GI:33057491
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                                                                BD247722
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A61P43/00, C12N5/02, C12N15/00
Description of Artificial Sequence: Synthetic
Location/Qualifiers
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A61P43/00,C12N5/02,C12N15/00
Description of Artificial Sequence:Synthetic
Key Location/Qualifiers
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/db_xref="taxon:32630"
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/mol_type="genomic DNA"
/db_xref="taxon:32630"
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artificial sequences.

I (bases 1 to 20)

E 1 (bases 1 to 20)

R Dean, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 70 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN JP 2002539846-A 70

PD 26-NOV-2002

PP 17-MAR-2000 JP 2000608790

PP 17-MAR-2000 JP 2000608799

PR 26-MAR-1999 US 09/280799

PR 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-1999
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Antisense modulation of interleukin-5
BD247723
BD247723.1 GI:33057493
JP 2002559846-A/71.
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1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction Patent: JP 2002539846-A 71 26-NOV-2002;

ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/71
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16-MAR-1999 US 00/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
                                                                                                                                                                                                                                                                                                                                                      26-NOY-2002
17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00, A61P43/00,
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Location/Qualifiers
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Location/Qualifiers
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ive 0; Mismatches
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AX801571
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AR300438/c
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AX805803
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Sequence 4 from I
AR300438
AR300438.1 GI:3:
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AX801571
AX801571.1 GI:38500543
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Sequence 7 from Patent WO03060119.
AX805803
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Method to quantify in vivo rna levels
Patent: EP 1329506-A 7 23-JUL-2003;
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                                                                                                                                                                                                                                                                                                                            synthetic construct
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artificial sequences.
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llarity 100.0%;
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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AR136212/c
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1 (bases 1 to 22)

Guo,H., Lawton,R., Mermer,B. and Aiyappa,A.P. Methods and compositions concerning canine in Patent: US 6537781-A 4 25-MAR-2003;
                           1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and McKay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: US 6136603-A 15 24-OCT-2000;

Location/Qualifiers
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Sequence 4 from Patent WO0111049.
AX083942 GI:13185504
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Canis familiaris (dog)
Canis familiaris
                                                                                                        Unclassified.
                                                                                                                      Unknown
                                                                                                                                    Unknown.
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Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
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/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="unassigned DNA"
/db_xref="taxon:9615"
                                                                                                                                                                                                                                                                                                                                                                       /note="PCR primer"
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mol_type="unassigned
               organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                              organism="Canis familiaris"
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Pred. No. 1.1e+02;
0; Mismatches 2;
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Pred. No. 1
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DEFINITION
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BD247667/c
LOCUS
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AR136272/c
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AR136269/c
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BD247667.1 GI:33057437
JP 2002539846-A/15.
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Sequence
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AR136272
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                                                                                                                                                    19;
                                                                                                                                                                                                                                     Unclassified.
1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 75 24-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 20)
Dean,N.M., Karras,J.G. and McKay,R.
Antisense modulation of interleukin-5
Patent: US 6136603-A 72 24-OCT-2000;
Location/Qualifiers
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19; Conserv
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/mol_type="unassigned
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/mol_type="unassigned
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CE 1 (bases 1 to 20)

CE 1 (bases 1 to 20)

RS Dean, N.M., Karras, J.G. and Mckay, R.

RS Dean, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539946-A 72 26-NOV-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence

PN JP 2002539846-A/72

PD 26-NOV-2002

PP 17-MAR-2000 JP 2000608790

PR 26-MAR-1999 US 09/280799

PR 26-MAR-1999 US 09/280799

PR 26-MAR-1999 US 09/280799

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-309 US 09/280799

PR 26-MAR-309 US 09/280799

PR 26-MAR-309 US 09/280799

PR 26-MAR-309 US 09/280799

PR 26-MAR-1099 US 09/280799

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-1099 US 09/280799

PR 26-MAR-1099 US 09/280799

PR 26-MAR-2000 JP 2000608790

PR 26-MAR-2000 JP 2
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1 (bases 1 to 20)

Dean, N.M., Karras, J.G. and Mckay, R.

Antisense modulation of interleukin-5 signal transduction
Patent: JP 2002539846-A 15 26-NOV-2002;

ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/15
PD 26-NOV-2002
PP 17-MAR-2000 JP 2000608790
PR 26-MAR-1999 US 09/280799
PR 26-MAR-1999 US 09/280799
PR 26-MAR-1999 US 09/280799
PC C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P3
PC A61P43/00,
PC A61P43/00, C12N15/02,C12N15/00
PC A61P43/00,C12N5/02,C12N15/00
PC A61P43/00,C12N5/02,C12N15/02
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PC A61P43/00,C12N5/02
PC A61P43/00,C12N5/02
PC A61P43/00,C12N5/02
PC A61P43
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26-MAR-1999 US 00/2800799
NICHOLAS M DEAN JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
            Conservative
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Score 18.4; DB 1;
Pred. No. 1.1e+02;
0; Mismatches 1
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Pred. No. 1.1e+02;
0; Mismatches 1
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AR300437
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635 CATTGGTGAAAGAGACCTTG
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Methods
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1 (bases 1 to 20)

Dean,N.M., Karras,J.G. and Mckay,R.

Dean,N.M., Karras,J.G. and Mckay,R.

Antisense modulation of interleukin-5 signal transduction

Patent: JP 2002539846-A 75 26-NOV-2002;

ISIS PHARMACRUTICALS INC
OS Artificial Sequence
PN JP 2002539846-A/75

PD 26-NOV-2002
                                                                                                                                                                                                                                                     AR300437
Sequence 3 from patent US
AR300437
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Antisense modulation of
BD247727
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                                                                                                                                        Patent:
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                                                 Similarity
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o, H., Lawton, R., Mermer, B. and Aiyappa, A.
thods and compositions concerning canine
tent: US 6537781-A 3 25-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
C12N15/09, A61K31/711, A61K48/00, A61P11/06, A61P29/00, A61P35/00,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                      /organism="unknown"
/mol_type="genomic
                                                                                                                          Location/Qualifiers
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95.0%;
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                                                                                     _type="genomic
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Pred. No. 1.1e+02;
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Pred. No. 1.
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CAGTGGTGAAAGAGACCTTG

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unidentified unidentified unclassified.
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Sequence 12 from Patent EP 0267779.
105460
                                                                 Sequence 1514 from Patent WO9833904. A89366
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Coffman,R., Yokota,T., Crute,J.J., Lee,F. and Arai,K.-i.
Human pleiotropic immune factor and muteins thereof
Patent: EP 0267779-A2 12 18-MAY-1988;
                                                    A89366.1
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Sequence 3 from Patent WO0111049,
AX083941
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Guo, H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
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                                                     GI:6737936
                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
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/db_xref="taxon:9615"
                                                                                                                                                                                                                                                                              organism="unknown"
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Pred. No. 1.2e+02;
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Pred. No. 1.1e+02;
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A89368/c
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A89367/c
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Sequence
A89368
                                                                                        1 (bases 1 to 18)
Erysch, W. and Schlingenslepen, K.
ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
PATENTE, WO 9833904-A 1516 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
LOCATION/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 18)
Brysch, W. and Schlingensiepen, K.
ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
PATENT: WO 9833904-A 1515 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
Location/Qualifiers
                                                                                                                                                                          unidentified unclassified.
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Brysch, W. and Schlingensiepen, K.
ANTISENSE OLIGONUCLECTIDE PREPARATION METHOD
PATENT: WO 9833904-A 1514 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
Location/Qualifiers
                                                                                                                                                                                                    unidentified
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                                     /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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0.6%;
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100.0%; Fred. No. 1e+02;
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A89371/c
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Best Local Similarity
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Brysch, W. and Schlingenslepen, K.

AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD

Patent: WO 9833904-A 1518 06-AUG-1998;

BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)

Location/Qualifiers
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A89369
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Sequence 1519 from Patent A89371
A89371.1 GI:6737941
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Sequence 1518 from Patent WO9833904.
A89370
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Brysch, W. and Schlingensiepen, K.
ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
PATENT: WO 9833904-A 1517 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                       unidentified unidentified
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llarity 100.0%;
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/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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139665
                                                                Unclassified.

(bases 1 to 18)
Sullivan,S., Draper,K.G., McSwiggen,J.
IL-5 targeted ribozymes
Patent: US 5616488-A 705 01-APR-1997;
Location/Qualifiers
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Brysch, W. and Schlingensiepen, K.

ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD PATENT: WO 9833904-A 1519 06-AUG-1998;

BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
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Sullivan, S., Draper, K.G., McSwiggen, J.
IL-5 targeted ribozymes
Patent: US 5616488-A 703 01-APR-1997;
Location/Qualifiers
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/mol_type="unassigned DNA"
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                                               organism="unknown"
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00.0%; Pred. No.
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Sullivan, S., Draper, K.G., McSwiggen, J.
IL-5 targered ribozymes
Patent: US 5616488-A 709 01-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sullivan, S., Draper, K.G., McSwiggen, J. IL-5 targeted ribozymes Patent: US 5616488-A 707 01-APR-1997;
Unknown.
Unclassified
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/mol_type="unassigned DNA"
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/mol_type="unassigned DNA"
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I39781
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Sullivan, S.M. and Draper, K.G.
Ribozymes targeted to TNF-.alpha. RNA
Patent: US 5616490-A 42 01-APR-1997;
                                                                                                                                                                 Stinchcomb, D.T., Dudycz, E.W., Chowrita, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                       unidentified unidentified
                                                                                                                                                                                                                                                                                                              Sequence 2907 from Patent AX635768
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Sull'van, S.M. and Draper, K.G.
Ribozymes targeted to TNF-.alpha. RN.
Patent: US 5616490-A 54 01-APR-1997;
                                                                                                                             genes
                                                                                                                                        Method and reagent for inhibiting the expression of
                                                                                                                                                                                                                                        unclassified
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                                                                                              Patent: EP 1260586-A 2907 27-NOV-2002; RIBOZYME PHARMACEUTICALS, INC. (US)
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Similarity 100.0%;
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/mol_type="unassigned DNA"
                                                                                  Location/Qualifiers
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                           /organism="unidentified"
/mol_type="unassigned RN
/db_xref="taxon:32644"
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Pred. No. 1e+02;
  Score 18;
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AX635770
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Best Local Similarity
Matches 18; Conserv
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Best Local Similarity
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AX635770
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                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2911 from Patent AX635772
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RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisk, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                Patent: EP 1260586-A 2911 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
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                                                                 /organism="unidentified"
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/db_xref="taxon:32644"
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/mol_type="unassigned RNA"
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0.6%; Score 18; DB 1; 100.0%; Pred. No. 1e+02; tive 0; Mismatches
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Matches 18; Conserv
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                                                                                                                                                                                                                                                                         Schlingensiepen, K.H. and Brysch, W. An antisense oligonucleotide preparation method Patent: JP 2001511000-A 1514 07-AUG-2001; BIOGNOSTIK GESELLSCHAPT FUR BIOMOLEKULARE DIAGNOSTIK MBH
                                                                                                                                                                                                                                                                                                                                                                      unidentified
                                                                                                                                                                                                                                                                                                                                                                                   JP 2001511000-A/1514. unidentified
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                                                                                                                                                                30-JAN-1998 JP 1998532533
31-JAN-1997 EP 97101531.8
31-JAN-1997 EC 97101531.8
KARL HERWANN SCHLINGENS IEPEN, WOLFGANG BRYSCH
C12N15/11,C07H21/04,A61K31/70
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                                                                                                                                                                                                                                             Unknown
JP 2001511000-A/1514
                                                                                                                                                    An antisense oligonucleotide
                                                                                                                                     Location/Qualifiers
                                                                                    /organism='Unknown'.
Location/Qualifiers
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/db_xref="taxon:32644"
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/mol_type="genomic DNA"
/db_xref="taxon:32644"
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Local

Pred. No. 1e+02;

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BD066881/c
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BD066880/c
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AUTHORS
ACTITLE
An antisense oligonucleotide preparation method
Patent: JP 2001511000-A 1515 07-AUG-2001;
BICONOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
OS Unknown
PN JP 2001511000-A/1515
PD JO 7-AUG-2001
PF 30-7AN-1998 JP 1998532533
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S Schlingensiepen, K.H. and Brysch, W.
An antisense oligonuclectide preparation method
A nantisense oligonuclectide preparation method
L Patent: JP 2001511000-A 1516 07-AUG-2001;
BICCNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTI
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PF 30-JAN-1998 JP 1998532533
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PF 31-JAN-1997 EP 97101531.8
PI KARL HERMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH
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31-JAN-1997 EP 97101531.8
KARL HERMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH
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1 (bases 1 to 18)
Schlingensiepen,K.H. and Brysch,W.
Schlingensiepen,K.H. and Brysch,W.
An antisense oligonucleotide preparation method
Patent: JP 2001511000-A 1518 07-AUG-2001;
BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
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An antisense oligonucleotide preparation method

L Patent: JP 2001511000-A 1519 07-AUG-2001;

BIOGNOSTIK GESELL/SCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH

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JP 2001511000-A/1519

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PP 30-JAN-1998 JP 1998532533

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31-JAN-1997 EP 97101531.8
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234 seqs, 5203 residues

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Low adenosine anti cDNA synthesis pri PCR primer IL5-1 u Ovine IL-5 gene fo Mouse Interleukin Artificial sequenc Enzymatic RNA mole Enzymatic RNA mole Human interleukin

Page 2

	d) entry)	64; -2003 (revised) -1995 (first en	.Q69464; -MAR-2003 -FEB-1995	AC AAQ6 XX DT 25-M DT 27-F	Human interleukin- Human interleukin- Human interleukin- Human interleukin- Human interleukin-	1 ADR12049 1 ADR12018 1 ADR12022 1 ADR12030 1 ADR12030	. 22222	 22222	C 174 C 175 C 176 C 177 C 178
	DNA; 50 BP.	tandard; DI	9464 B	RESULT 1 AAQ69464 ID AAQ6	****	ADR1203 ADR1203 ADR1203 ADR1202 ADR1202		 N N N N N	17
	ALIGNMENTS				5555	ADR1202 ADR1202 ADR1202		 2222	1666
Human oligonucleot AA677534-derived o	20 1 ABZ93890 20 1 ABD30120	00. 55	16.4	c 236 c 237	188	ADR1204		 322I	166
PCR primer used to			שיפיי	C 234		ADR1203		 200	16
Murine interleukin Human retinaldehyd	- -		თ თ		55	ADR1204 ADR1202		 20 20	16
Chimeric phosphoro	بر بر		ი ი	c 230 c 231	p p	ADR1203 ADR1204		 20	15
AI051839-derived o	⊢ ⊢		0.0		111	ADR1204		 200	15
Mouse Interleukin	ــر ــ		ע פֿע		111	ADR1202		20	3 15
<pre>IL-5 promoter muta Murine IL-5 antise</pre>	ם ב		െ ച		Human interleukin- Human interleukin-	ADR1203		 20	155
Enzymatic RNA mole	-		ш.	224	Ħ.	ADR1203		 20	15
Human G72 siNA oli	بر د		17.4	c 222	1 15	ADR1201		20	1 1 2 1
Human G72 sina oli	,		7	221	interleuki	ADR1204		 20	14
IL-5 promoter muta			7 _		il	ABD1925		 220	14
Human ILS DNA frag	μ,		18		IL-5 antie	ABZ9528		 20	14
Human IL-5 antisen Human IL5 DNA frac			1 1 8 8	c 216	Interleuki	ABX0436		 220	44
Human IL-5 antisen	н,		18		H	ABX0435		 20	μ.
Human ILS polynuci	ب ب		1 11 8 8		3 5	ABX0434		 20	1 4 4
Human ILS polynucl	р,		18	c 212	H	ABX0436		 20	13
Low adenosine anti	بر ب		. p. 8		7 H	ABX0436		 20	ב ט
Human IL-5 antisen	Н		18		H	ABX0435		20	13
Human IL-5 antisen	- -		18		55	ABX0435		 20	13
Human IL5 antisens	بر د		18		15	ABX0437		20	
Human IL-5 hammerh	P		18	205	H	ABX0436		20	13
Human IL-5 hammerh Human IL-5 hammerh	بر بر		18	203	55	ABX0435		 200	11 5
Human IL-5 hammerh	-		18	202	H	ABX0434		20	12
Enzymatic RNA mole	- -		۵. ۵		55	ABX0436		 20	12
Murine interleukin	بر د		œ	c 199	H	ABX0435		20	
Human interleukin-	۲,		00 0		H	ABX0434		 20	12
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Human Interleukin	μ.		8		H	ABX0435		20	12
Canine interleukin	μ,		00 0		H	ABX0434		 20	12
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11.	ــر د		19		5 5	ABX0434) N	4
Human ILS polynucl			19		Ħ	ABX0434		20	11
Low adenosine anti	,		19		5	ABX0437		 20	11
Human IL-5 antigens	ے د		1 P		3 5	ABXO434		2 0	<u> </u>
Human DNA probe us	ب.		v		Ħ	AAF1958		200	1
Human leukocyte ge	<u>_</u>		ø		Ħ	AAC7370		20	15
Human leukocyte ge	,		19.2		Human IL-5 antigen	AAC7368		 20	10
Phytochrome 10 PCR	_		4						۲

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RESULT 2
AAT63926
ID AAT64
XX AAT68
AC AAT68
XX DT 25-W
DT 17-W
XX XX Dupl
KW TFII
                                                                                                                                                                                                                                                                                                                                                                                                                              A DNA protein-binding assay is provided, useful for screening libraries CC of synthetic or biological cpds. for their ability to bind DNA test CC sequences. The assay is versatile in that any number of test sequences CC can be tested by placing the test sequence adjacent to a defined protein CC binding screening sequence. Binding of mols. to these test sequences CC changes the binding characteristics of the protein mol. to its cognate CC binding sequence. When such a mol. binds the test sequence, the CC could be concentration of free DNA probe. One application of this method is to eucaryotic general transcription factors (e.g. TPIID), where the target region is typically selected from DNA sequences adjacent to the CC target region is typically selected from DNA sequences adjacent to the concentration of the sequences in AAQ69251-731 and AAQ69850 CC correspond to promoter targets (typically, TATA box-contg. sites) for human genes and the sequences in AAQ69732-849 correspond to promoter targets for viral genes. The test sequences may also be randomly CC generated. DNA;protein interaction may be used for screening purposes, c.g. the Herpes Simplex Virus (HSV) origin of replication and UL9 (see CAAQ69851-52, AAQ69865 and AAQ69891). (Updated on 25-MAR-2003 to correct
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Best Local S
Matches 50
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence-directed DNA-binding molecules
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Duplex DNA; target region; binding characteristic; DNA binding protein; TFIID; transcription factor; binding site; inhibition; enhance; IL-2; cancer; inherited genetic disorder; alpha-D-galactosidase A; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 50
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17-SEP-1993;
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                                                                                                          25-MAR-2003
17-MAR-1997
                                                                    Human interleukin-5 gene TFIID binding site.
                                                                                                                                                                                               AAT63926 standard; DNA; 50 BP
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                                                                                                       (revised)
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93US-00123936.
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Pred. No. 3.8;
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    useful in pharmaceuticals and

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                                                                           Matches
                                                                                             Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Altering binding characteristics of DNA binding proteins to duplex DNA by attaching specific small cpd. to target region close to the protein' binding site, useful in treatment of viral disease, cancer etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fry KE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-JUN-1991;
23-DEC-1992;
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                                                                                                                                                    Sequence 50 BP; 16 A; 11 C; 10 G; 13 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 6; Col 207-208; 264pp; English.
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                                   459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT
                                                                           50;
                                                                                               Similarity
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CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT
                                                                         Conservative
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92US-00996783.
93US-00123936.
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                                                                                           1.5%;
                                                                           0
                                                                                                              Score
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                                                                                               3.8;
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                                                                                                              Length 50;
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                                         508
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                                                                               Gaps
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Test sequence; DNA-binding molecule; screening sequence; human; nucleic acid amplification; target; viral; ds.
                                                                                              AAX17214 standard;
                                                               06-MAY-1999
                                                                               AAX17214;
                                                               (first entry
                                               from human interleukin 5 (IL-5)
                                                                                               DNA;
                                                                                               50
                                                                                               ВP
                                               gene
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RESULT 4
ABK82705
ID ABK8
XX ABK8
AC ABK8
AC ABK8
XX ABK8
XX ABK8
XX ABK8
XX DIN 27-J
XX DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              correspond to promoter targets for viral genes

chaving a test sequence adjacent to a screening sequence, where the
screening sequence binds to the DNA-binding protein with a binding
affinity that is independent of the DNA sequence of the test sequence,
and where the mixture of duplex DNA test oligonucleotides includes
several test sequences; (ii) incubating the test molecule, the mixture of
duplex DNA test oligonucleotides and the DNA-binding protein for a time
sufficient to permit binding of the test molecule to test sequences in
the duplex DNA; (iii) separating unbound test oligonucleotides from test
cligonucleotides bound to binding protein; (iv) amplifying the unbound
test oligonucleotides; (v) repeating steps (ii) to (iv); (vi) isolating
the amplified test oligonucleotides; and (vii) sequencing the isolated
test oligonucleotides. Test sequences AAX17001-X17481 and AAX17600
correspond to promoter targets for human genes and test sequences
AAX17482-X17599 correspond to promoter targets for viral genes
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Best Local S
Matches 50
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23-DEC-1992;
17-SEP-1993;
20-DEC-1993;
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(i) adding a test molecule and a DNA-binding protein to a mixture of duplex DNA test oligonucleotides, each of the test oligonucleotides
                                                                                          DNA binding molecule screening; inhibition of transcription; human immunodeficiency virus; HIV; parasite; cancer; cardiov; respiratory; gastrointestinal; endocrine; metabolic; rheumat;
                                                              immunological; ha ophthalmological;
                                                                                                                                                          DNA binding
                                                                                                                                                                                            27-AUG-2002
                                                                                                                                                                                                                            ABK82705;
                                                                                                                                                                                                                                                          ABK82705 standard; DNA;
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                                                                             ry; gastrointestinal; endocrine; ical; haematological
                                                                                                                                                             molecule
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92US-00996783.
93US-00123936.
93US-00171389.
                                                                             haematological; neurological;
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100.0%; Pr
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                                                              ological; psychiatric; dermatological;
urogenital disorder; ss.
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o oligonucleotide sequence
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                                                                                                           cardiovascular;
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US6384208-B1

WO200257414-A2

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                                                                                                                                                                                                                                                                                                                                                                                  Matches
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Best Local (
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17-SEP-1993;
20-DEC-1993;
07-JUN-1995;
                                                                                                           T7; leukocyte; gene expression profiling; allograft rejection; atherosclerosis; congestive heart failure; systemic lupus eryt rheumatoid arthritis; osteoarthritis; cytomegalovirus; infecti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI;
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                                                                   Homo
                                                                                                                                                                                                09-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-MAY-2002
                                                                                                                                                                   Human leukocyte
                                                                                                                                                                                                                           ABZ03720;
                                                                                                                                                                                                                                                       ABZ03720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-JUN-1991;
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                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                               459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT
                                                                                                                                                                                                                                                                                                                                                                                  l Similarity
50; Conserv
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                                                                                                                                                                                                                                                       standard; DNA; 50
                                                                                                                                                                                                                                                                                                                                                                                                                                          50
                                                                                                                                                                                                                                                                                                                            CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  transcriptional activity of genes for administration of an agent that binds the gene.
                                                                                                                                                                                                                                                                                                                                                                               1.5%; So lilarity 100.0%; I Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 16 A; 11 C; 10 G; 13 T;
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                                                                                                                                                                                                (first entry)
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93US-00123936.
93US-00171389.
95US-00482080.
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                                                                                                                                                                   gene
                                                                                                                                                                   expression
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                                                                                                                                                                                                                                                                                                                                                                                                Score 5
                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                   profiling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         English.
                                                                                                                                                                                                                                                                                                                                                                                                 . 50;
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                                                                                                                                                                                                                                                                                                                                                                                              DB 1
                                                                                                                                                                                                                                                                                                                                                                                                                                         0 U;
                                                                                                                                                                   probe
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Other;
                                                                                                                                                                    SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  treating infections or to two non-overlapping
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                                                                                                            pus erythematosus;
infection; probe;
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene, where the gene corresponds to any of 8143 oligonuclectides (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful for leukocyte expression profiling. It is particularly useful for disgnosing a disease, monitoring (rate of) progression of a disease, predicting therapeutic outcome, determining prognosis for a patient, predicting disease complications in an individual or monitoring response to treatment in an individual. The diseases include cardiac allograft rejection, kidney allograft rejection, liver allograft rejection, atheroselerosis, congestive heart failure, systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New system for leukocyte expression profiling, diagnosing a disease, or monitoring (the rate of) progression of a disease, e.g. atherosclerosis or congestive heart failure, comprises diagnostic oligonucleotides.
                                                                                                                                                                                                                                              T7; leukocyte; gene expression profiling; allograft rejection; atherosclerosis; congestive heart failure; systemic lupus erythematosus; rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wohlgemuth J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-OCT-2000; 2000US-0241994P.
08-JUN-2001; 2001US-0296764P.
                                                                                                                         22-OCT-2001; 2001WO-US047856
                                                                                                                                                    25-JUL-2002.
                                                                                                                                                                              WO200257414-A2.
                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                    Human leukocyte gene expression profiling
                                                                                                                                                                                                                                                                                                                                 09-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                      ABZ02014 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    comprises one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 445; Opp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-OCT-2001; 2001WO-US047856
                             Wohlgemuth J,
                                                                                 20-OCT-2000; 2000US-0241994P
08-JUN-2001; 2001US-0296764P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (BIOC-) BIOCARDIA INC
                                                      (BIOC-) BIOCARDIA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2327 TCAGAGGGAAAGTAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 2376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Woodward
                 Woodward
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                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or two isolated DNA molecules that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d Fry K,
                            Fry K,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.5%;
              Quertermous
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matcuk G,
                                                                                                                                                                                                                                                                                                                                                                                      50
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Pred. No. 3.8;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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                           Altman P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for detecting gene expression, which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Johnson
               Johnson
                                                                                                                                                                                                                                                                                                    probe SEQ
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                 'TJ
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                            Prentice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 50;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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RESULT 7
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a system for detecting gene expression, which comprises one or two isolated DNA molecules that detect expression of a gene, where the gene corresponds to any of 8143 oligonucleotides (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful for leukocyte expression profiling. It is particularly useful for diagnosing a disease, monitoring (rate of) progression of a disease, predicting therapeutic outcome, determining prognosis for a patient, predicting disease complications in an individual or monitoring response to treatment in an individual. The diseases include cardiac allograft rejection, kidney allograft rejection, liver allograft rejection, atherosclerosis, congestive heart failure, systemic lupus erythematosus, heavened to the statistic authorities of the systemic lupus erythematosus,
                                                                                                                                                                                                                                                                                                                                                                                                                                               systemic lupus erythematosis; rheumatoid arthritis; cholecystitis; Sjogren's disease; CREST syndrome; scleroderma; ankylosing spondylitis; ulcerative colitis; primary sclerosing cholangitis; appendicitis; diverticulitis; primary biliary sclerosis; probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New system for leukocyte expression profiling, diagnosing a disease, or monitoring (the rate of) progression of a disease, e.g. atherosclerosis or congestive heart failure, comprises diagnostic oligonucleotides.
                                                                                             Diagnosing or monitoring autoimmune and chronic inflammatory diseases, such as rheumatoid arthritis, systemic lupus erythematosus, ulcerative colitis, psoriasis and asthma by detecting the expression level of one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human DNA probe used to monitor expression of diagnostic genes SeqID930.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADG33606 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 50 BP; 19.A; 9 C; 11 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 390; Opp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI;
                                                Claim 1; SEQ ID
                                                                                                                                                                                                                                                                            24-APR-2002; 2002US-00131827
                                                                                                                                                                                                                                                                                                             24-APR-2003; 2003WO-US013015.
                                                                                                                                                                                                                                                                                                                                                 06-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                               WO2003090694-A2
                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human; ss; autoimmune; chronic inflammatory disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADG33606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
                                                                                                                                                                       WPI; 2003-877243/81
                                                                                                                                                                                                                                          (EXPR-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2327 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2002-636525/68
                                                                                  genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      50;
                                                                                                                                                                                                                                        EXPRESSION DIAGNOSTICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAGAGGGAAAGTAATTTTCAGGCATACTGACACTTTGCCAGAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                                                                                                                                                                                        Fry K,
                                                NO 930; 877pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.5%;
                                                                                                                                                                                                        Woodward R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВP
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 3. 
; Mismatches
                                                                                                                                                                                                        Ly N;
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3.8;
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autoimmune and

relates to novel methods for diagnosing and a chronic inflammatory diseases. Specifically,

monitoring, it refers

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This invention

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tools for the management of, in particular, patients with systemic lupus erythematosis (SLE) or rheumatoid arthritis (RA). Accordingly, the present invention describes a method for determining the levels of multiple differentially expressed genes of a patient, in a concerted manner, in order to achieve an improved diagnostic assay with sensitivity and specificity for the disease in question. As such, these genes are useful for the disease in fuestion. As such, these genes are including cholecystitis, Sjogren's disease, CREST syndrome, scleroderma, ankylosing spondylitis, ulcerative colitis, primary sclerosing cholangitis, appendicitis, diverticulitis, and primary biliary sclerosis. This oligonucleotide is a human DNA probe used to monitor the expression level of the differentially expressed diagnostic genes of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the identification of genes that have a clinical utility as diagnostic tools for the management of, in particular, patients with systemic lup erythematosis (SLE) or rheumatoid arthritis (RA). Accordingly, the
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Seguence 50 BP; 19 A; 9 C; 11 G; 11 T; 0 U; 0 Other;

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Matches
        Query Match
Best Local
        Local Similarity
50;
Conservative
       1.5%;
0
       Score 50;
Pred. No.
Mismatches
       3.8;
               DB 1;
<u>,</u>
               Length
Indels
               50;
0
Gaps
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0

2327 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 2376

TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 50

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RESULT 8
ADE80244
                                          ADE80244 standard; DNA;
 29-JAN-2004
(first entry)
                                          50
                                          ВÞ
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Duplex oligonucleotide for DNA protein binding DNA-binding; screening; promoter target; human; duplex DNA test oligonucleotide; DNA protein binding; assay seq id 214.

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US2003124530-A1
                              ното варіеля
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03-JUL-2003

13-NOV-2001; 2001US-00993346

CCCCCCCX 17-SEP-1993; 20-DEC-1993; 07-JUN-1995; 27-JUN-1991; 23-DEC-1992; 91US-00723618. 92US-00996783. 93US-00123936. 93US-00171389. 95US-00482080. 99US-00354947.

(GENE-) GENELABS TECHNOLOGIES INC.

Ç, Cantor CR, Andrews BM, Turin LM, FTY

2004-031270/03

Screening for sequence-directed DNA-binding molecules comprises adding test molecule to a test system composed of a DNA-binding protein and a duplex DNA test oligonuclectide having adjacent screening and test

SEQ ID NO 214; 283pp; English

binding to a selected test sequence in a duplex DNA. The above method comprises: constructing a duplex DNA test oligonucleotide having a screening sequence adjacent to a selected test sequence, where a DNA-binding protein is effective to bind to the screening sequence with a binding affinity that is substantially independent of such test sequence but where DNA protein binding to the screening sequence is sensitive t The invention describes a method for screening for molecules capable sensitive to ဓ္

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binding of test molecules to such test sequence; adding a test motobe screened to a test system composed of the DNA-binding protein anothe the duplex DNA test oligonucleotide having the screening and test sequences adjacent one another; incubating the molecule in the test system for a period sufficient to permit binding of the molecule being tested to the test sequence in the duplex DNA; and comparing the amount of binding protein bound to the duplex DNA before and after the adding. The method is useful in screening libraries of synthetic or biological compounds for their ability to bind DNA test sequences. The method may also be used in characterising the preferred binding sequences of any selected DNA-binding molecule. This sequence represents a test sequence corresponding to a promoter target of a human gene.
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Sequence 50 BP; 16 A; 11 C;
10 G; 13 T;
0 U; 0 Other;
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Query
Best L
   Matches
        Local
              Match
   50;
        Similarity
   Conservative
1.5%; bu
100.0%; Pr
        Score !
   Mismatches
         . No.
        3.8;
              DB 1;
   0
   Indels
   0
   Gaps
   0
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459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50

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RESULT 9
AAZ55589/c
AAZ55589
                                                                                    AAZ55589;
                                                                              15-SEP-2003
14-MAR-2000
                                                                                       standard; DNA; 42
                                                                              (revised)
(first entry)
                                                                                       BP.
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Degenerate mammalian IL-5 antisense PCR primer 1, SEQ ID NO:135

Interleukin; IL-4; IL-5; IL-13; Flt-3 ligand; CD40; CD40 lig
interferon-alpha; IFN-alpha; GMCSF; antibody; canine; feline
granulocyte macrophage colony-stimulating factor; inhibitor; vaccine; .mmune response; primer; 88. immunoregulation; tumour; cancer; autoimmune disease; feline; ligand; CD154;

Chimeric Felis catus. Homo sapiens

02-DEC-1999. WO9961618-A2

28-MAY-1999; 99WO-US011942

29-MAY-1998; 98US-0087306P

(HESK-) HESKA

Sim G, Yang S, Dreitz 3 Wonderling

2000-072623/06.

Nucleic acids encoding useful for treating or immunoregulatory proteins from cats or dogs, preventing e.g. tumors or autoimmune disease disease.

Example 5A; Page 106; 264pp; English

and feline granulocyte macrophage colony-stimulating factor (GMCSF), and nucleotides which encode these immunoregulatory proteins. The proteins, their associated nucleic acids, general associated for the cards, serior antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune response in animals (particularly cats, dogs, horses and humans). They may be used to treat autoimmune or infectious diseases including ligand) and fel The invention relates to canine interleukin-4 (IL-4), canine Flt-3 ligand, canine or feline CD40, canine or feline CD154 (ligand), canine IL-5, canine IL-13, feline interferon-alpha (CD40 (IFN-alpha) feline

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RESULT 10
AAQ57198
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Best Local S
Matches 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                response from a co-administered antigén. The nucleotide sequences can also be used for the recombinant production of a protein, while nucleotide fragments are useful as probes, as amplification primers and as sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug targetting. Sequences AAZ55491-Z55498, AAZ55513-Z55515 and AAZ5581-Z55608 represent PCR primers used in isolation, amplification and cloning of CDNAs encoding the immunoregulatory proteins of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 42 BP; 15 A; 5 C; 7 G; 13 T; 0 U; 2 Other;
                                                                                                                                                                                                                                                                                                                   03-FEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
26-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ57198 standard; mRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            allergies,
                                                                                                                                                                                                                                                                                             02-JUL-1993;
                                                                                                                                                                                                                                                                                                                                         WO9402595-A1
                                                                                                                                                                                                                                                                                                                                                                                   cardiovascular condition; hypertension; arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Enzymatic RNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tumours, inflammation and graft rejection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
(first en
                                                                                                                                                                                                                                                                                                                                                                                                                                       molecule IL-5 mRNA target sequence
                                                                                                                                                                                                                                                                                             93WO-US006316
                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 41.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
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07-DEC-1992;
07-DEC-1992;
19-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Interleukin-5; specific; cleavage; target RNA; protein; expression; inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention psoriasis; asthma; inflammatory diseases; restenosis;
RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a psoriatic or asthmatic condition. The concn. of the ribozyme necessary to effect a therapeutic treatment is
                                                                                                                                                                                    Enzymatic RNA molecules which cleave inflammatory, arthritic, stenotic or
                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JUL-1992;
07-DEC-1992;
                                                                    This is an IL-5 mRNA target sequence (nucleotide no. 370) of an enzymatic
                                                                                                                    Claim
                                                                                                                                                                                 inflammatory,
                                                                                                                                                                                                                                                        WPI; 1994-048853/06.
                                                                                                                                                                                                                                                                                                                                                (RIBO-) RIBOZYME PHARM INC.
                                                                                                               3; Page
                                                                                                                                                                                                                                                                                                     SM,
                                                                                                               17; 65pp;
                                                                                                                                                                                                                                                                                                                                                                                          92US-00916763.
92US-00987132.
92US-00989848.
92US-00989849.
93US-00008895.
                                                                                                                                                                                                                                                                                                   Draper
                                                                                                                                                                                                                                                                                                     ଟ
                                                                                                                 English.
                                                                                                                                                                                      mRNA - used to cardiovascular
                                                                                                                                                                                      treat or
diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           prevention;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
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Sequence 34 BP;

12 A; 9

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6 T; 0 U; 0 Other;

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2184 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 2216

GTAATGAACACCGAGTGGATAATAGAAAGTTGA

lower than that of an antisense of

an antisense oligonucleotide and

on 25-MAR-2003

to correct

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is higher. (Updated

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RESULT 11
AAT38975/c
ID AAT389
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XX CAT389
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
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         Query Match
Best Local S
Matches 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Use of interleukin-12 to treat papilloma virus-associated lesions - enas a vaccine adjuvant with papilloma virus antigen for immuno:therapy warts or tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytokine; expression profile; genital wart; interleukin 12; IL-12; tumour regression; adjuvant; polymerase chain reaction; PCR; tomour acuminata; human papilloma virus; HPV-6; HPV-11; HPV16; HPV18; anogenital; cutaneous; laryngeal; oesophageal; cancer; 88.
                                                                                                                      Sequence 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 14; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1996-442947/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stanley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-MAR-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Interleukin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9629091-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYCA-) UNIV CAMBRIDGE TECH SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2136 AGACGGAGAGTAAACCAATTCCTAGACTACCTGC
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                                       Similarity
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                                                                                                                                                                                and oesophageal
                                                                                                                            BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IL-5 3' PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first
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1.0%; ou
100.0%; Pr
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100.0%; Pr
                                                                                                                               9
                                                                                                                         C; 3 G; 14 T; 0 U; 0 Other;
                                                                                                                                                                                      cancers
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                                       Score 33;
Pred. No.
               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1;
26;
                                       DB 1;
30;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2169
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                                                                     Length 33;
               Indels
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               Gaps
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py of
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RESULT 12 AAT47001/c

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                                                                                                                                                        CC response after T-cell receptor stimulation. Naive T-cells which CC have recently emigrated from the thymus and have a predominantly proliferative response when exposed to cognate antigens for the first time. These primers can be used in the method of the invention. The cC method of the invention is for evaluating the efficacy of a drug to stimulate the production of naive T-cells. The method comprises obtaining a sample containing peripheral blood mononuclear cells from a subject. A cc suitable dose of a drug is then administered before a second sample is cobtained. The T-cells in each populations are then isolated from the samples. The cc unmber of naive T-cells in each population is then determined by cc reactive with naive T-cell surface proteins. If the number of naive T-cell surface proteins. If the number of naive T-cells in the second population is significantly greater than the number cc in the first, then the drug is identified as being effective. The method cc and be used to identify naive T-cell count elevating drugs, particularly in immuno-compromised subjects, e.g. HIV positive subjects, cancer patients or individuals with viral infection or autoimmune disease
                                                                                              Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT46992-T47005 represent amplification primers for DNA encoding cytokines from CD8 T-cells. This sequence and AAT47000 are primers for the interleukin-5 gene. CD8 cells provide cell mediated immunity through both cytotoxic and suppressor mechanisms. The naive subset of CD8 cells expresses the CD45RA surface marker, and make a relatively poor cytokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCR; polymerase chain reaction; primer; amplify; beta-actin; IL-2; IL-4; interferon-gamma; interleukin-2; peripheral blood mononuclear cell; IL-5; granulocyte macrophage colony stimulating factor; GM-CSF; cytokine; PBMC; CDB cell; T-cell; cell mediated immunity; cytotoxic; CD5RA; IL-10; HIV; surface marker; naive T-cell; thymus; proliferative response; antibody; cognate antigen; immuno-compromised; cancer; viral infection;
                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Detection of naive T cells in subjects
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1997-213057/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-APR-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    autoimmune disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Interleukin-5 primer B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT47001 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                Similarity
                                                                                                                                                        3
                          GTAATGAACACCGAGTGGATAATAGAAAGTTGA 2216
    GTAATGAACACCGAGTGGATAATAGAAAGTTGA
                                                                                                                                                        BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 23; 56pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                drugs for
                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rabin R,
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                                                                                                                                                        7 A;
                                                                                            1.0%;
                                                                                                                                                      9 C; 3 G; 14 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              immunocompromised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Herzenberg LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          English
                                                                            ٥,
                                                                                              Score 33;
Pred. No.
                                                                            Mismatches

    useful to identify production
d subject treatment.

                                                                                            DB 1;
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                                                                            <u>,,</u>
                                                                                                                Length 33;
                                                                            Indels
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RESULT 14
AAX54023/c
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AAT76227/c
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                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                               A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMILSASS specific for the human IL5. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary diseases bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby
                                                                                                                                                                                                                                                                                                                        preventing adenosine-induced bronchoconstriction in patients reactive airways
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       adenosine-free
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT76227;
                                                 Human
                                                                            05-JUL-1999
                                                                                                                              AAX54023 standard;
                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 5; Page 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Treatment of airway diseases such as asthma -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human IL5 antisense oligonucleotide HUMIL5AS8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAT76227 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9640162-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYEC-) UNIV EAST CAROLINA
                                                                                                                                                                                                                      3123 CCCGGGGCAGGCCACCAGGCCGCACAACA 3154
                                                 IL-5
                                                                                                                                                                                             32
                                                                                                                                                                                                                                              32;
                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                32 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Metzger WJ;
                                                 antisense oligonucleotide fragment.
                                                                                                                                                                                                                                               Conservative
                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rway diseases such as asthma - by topically applying antisense oligo:nucleotide to airway epithelium of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95US-00474497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96WO-US009306
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                                                                                                                                                                                                                                                                                                Α,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               71pp; English
                                                                                                                              DNA; 32
                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                              11 C; 13 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                       1.0%;
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                                                                                                                                                                                                                                                           Score 32;
Pred. No.
                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                      DB 1;
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                                                                                                                                                                                                                                                                                                                                     with hyper
                                                                                                                                                                                                                                             Gaps
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Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis;

acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis;

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RESULT 15.
AAA33467/c
ID AAA334
XX
AC AAA334
XX
DT 28-JUL
XX
DT 28-JUL
XX
XX
XX
DE Low ad
XX
KW Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX55272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukanias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, hepaticcellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pulmonary hypertension; pulmonary vasoconstriction; emphysema;
chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
colon cancer; breast cancer; lung cancer; pancreatic cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 49; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-229400/19
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09-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-1998;
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                                                                                                                                                                                                                                                                    AAA33467 standard; DNA; 32 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 32 BP; 0 A; 11 C; 13 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vasoconstriction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UYEC-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3123 CCCGGGGCAGGCAGCAGGCCGCACAACA 3154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           as all types of cancers which may metastasize or have metastasized he lungs, including breast and prostate cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                      32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-0059160P.
98US-00093972.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
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Low adenosine antisense oligonucleotide SEQ ID NO:1156.

AAF19589/c ID AAF195 XX AC AAF195

AAF19589 standard; DNA; 32

AAF19589

밁 Ś

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28-JUL-2000

(first entry)

Human; adenosine receptor; low adenosine antisense oligonucleotide;

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The present invention describes a new composition comprising an antisense CC oligonuclectide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or CC inflammation. The ON can have antiinflammatory, antiallergic, and/or CC useful for the treatment of diseases associated with inflammation. CC impaired aliways, including lung disease and diseases whose secondary ceffects afflict the lungs of a subject. They can be used for treating CC effects afflict the lungs of a subject. They can be used for treating CC impeded respiration, respiratory distress syndrome, pain, cystic impeded respiration, respiratory distress syndrome, pain, cystic cfibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, CC carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the createse of deoxyademosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present the present on the present on the present on the present on the previously named sequences. SEQ ID NO:1 to 2815, and then the last 185 sequences given in the disclosure of the present invention do not match contains. N.B.

Sequences given in the disclosure of the present invention do not match contains.
                                                                                                                                               Query Match
Best Local S
Matches 32
                                                                                                                                                                                                                                                                                                      Sequence 32 BP; 0 A; 11 C; 13 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 18; Page 409; 1343pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-205971/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200009525-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nyce JW
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                                                                                                                                                                                                                                                                                                                                                                             listing
                                                                       3123 CCCGGGGCAGGCAGCACCAGGCCGCACAACA 3154
                                                                                                                                               32;
32
                                                                                                                                                                                      Similarity
CCCGGGGCAGGCAGCAGGCCGCACAACA
                                                                                                                                                   Conservative
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                                                                                                                                                                              1.0%;
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                                                                                                                                                                                  Score 32;
Pred. No.
                                                                                                                                               Mismatches
                                                                                                                                                                                                                              DB 1;
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                                                                                                                                                                                                                      Length 32;
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                                                                                                                                                   Gaps
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14-MAR-2001

(first entry)

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The present invention describes low adenosine (A) content antisense coligonucleotides and compositions (I) comprising them. In the antisense coligonucleotides the A is replaced by a 'Universal' or alternative base. (C(I) can have respiratory, bronchodilator, antiinflammatory, analgesic, the antisense oligonucleotides and (I) can be used to down-regulate the cexpression and or activity of target polypeptides associated with colling/respiratory disorders and malignancies, such as stimulating and cativating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cyrokines and compositions proteins, adenosine receptors, binding proteins, adenosine receptors, bradykinin receptors, central compositions, contral nervous and non-nervous system exceptors, central nervous system (C(NS)) and peripheral nervous and non-nervous system peptide receptors, binding proteins and malignancy associated proteins. The cantisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasocated with a disease or condition selected from pulmonary vasocated with a disease or condition, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary colleges, asthma, impeded respiration, pulmonary viscetions, bronchitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration;
pulmonary transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 14; Page 208; 1592pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-679539/66
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(NYCE/) NYCE J W.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polynucleotide fragment #1156
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               exemplification of
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Query Match Best Local Similarity

1.0%;

33 33

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Length

Query Match Best Local

Similarity

1.0%;

Length 32;

Sequence 32 BP; 0 A;

11 C; 13 G; 8 T; 0 U; 0 Other; Score 32; Pred. No.

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RESULT 17
ABZ95283/C
ID 9ABZ952
XX ABZ952
XX WO2002
XX WACALLY APR
XX ABZ952
XX WALLY APR
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                                                                                                                         CC junctions of genes encoding a polypoptide associated with lung and/or CC nasal airway dysfunction and a second active agent comprising an CC antiinflammatory steroid and ubiquinone. A composition of the invention CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive, and cytostatic activity. The composition may have a CC use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also CC for enhancing the prophylactic or therapeutic respiratory effect of an CC antiinflammatory steroid in a subject, for reducing or depleting levels of cf. or reducing sensitivity to adenosine, reducing levels of adenosine creceptor, producing bronchodilation, increasing levels of adenosine composition inflammation, lung allargies, or a respiratory disease or condition. CC lung surfactant in a subject s tissue, or treating bronchoconstriction, CC lung inflammation, lung allargies, or a respiratory disease or condition. CC Note: The sequence data for this patent is not represented in the printed constriction, but was obtained in electronic format directly from WIPO are ferroity for the control of the printed constriction, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel pharmaceutical composition, which the first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking region, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
    Sequence 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Мусе JW
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                                                                                  CC composition of light production and production and production or traget way or composition of the invention and or composition of target polypeptide production and administered to a mammal. The collection of a target polypeptide associated with lung airway or lung CC expression of a target polypeptide associated with lung airway or lung CC expression of a target polypeptide associated with lung airway or lung CC dysfunction or cancer and can be anti-sense to the corresponding mRNA. CC The invention also describes a kit, that comprises: (a) a delivery CC device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition CC of the invention has antiallergic, antiinflammatory, antiasthmatic, analysesic, hypotensive, immunosuppressive and cytostatic activity, is a Cc treating a respiratory, lung or malignant disease. The administered CC composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to CC reduce the amount of target polypeptide present in the lungs. The composition, allergies and/or bonchoconstriction and/or lung CC inflammation, allergies and/or surfactant hypoproduction are associated CC with a disease or condition such as milmonary vasoconstriction.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and
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with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respirate distress syndrome, pain, cystic fibrosis, allergic rhinitis, pu
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Best Local
                                  The present invention describes a method for concentrating a gene in a trace amount from a DNA sample containing the gene by separating it from a gene in a large quantity comprises dividing the sample into driver and target DNA fractions, mixing and forming single-stranded DNAs from them, hybridisation to produce a double-stranded DNA, and repeating the steps. The method can be used for concentrating a trace amount of an expressed gene even from large amounts of a (un)known gene, which is useful in screening industrial enzymes, pharmaceutical and agrochemical leads from nature e.g. soil, river and lake water, as well as antibiotics, and identifying parasitic and infectious microorganisms for disease diagnosis. The present sequence represents a PCR primer which is used in an example from the present invention
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                                                                                                                                                                                                                                                                            Method for concentrating trace genes expressed even in presence of amounts of (un)known genes, useful in screening industrial enzymes, pharmaceutical and agrochemical leads from nature.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Concentrating gene; industrial enzyme scr
agrochemical; identification; parasitic;
disease diagnosis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 32 BP; 0 A; 11 C; 13 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       prevent any unwanted effects due to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-DEC-2001; 2001WO-JP011113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABN89420 standard;
                                                                                                                                                                                                                                              Example 1; Page 33; 62pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-508798/54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-DEC-2000; 2000JP-00386025
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human ILSh related PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                   (SUNT-)
                                                                                                                                                                                                                                                                                                                                                                                                                                  (SUNR)
                               example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3123 CCCGGGGCAGGCAGCACCAGGCCGCACAACA 3154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      32;
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                                                                                                                                                                                                                                                                                                                                                                                                                 SUNTORY
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                                                                                                                                                                                                                                                                                                                                                                                                                   BIOMEDICAL RES
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                               present
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Mismatches
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ic; infectious; microorgani
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NO:5
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Best Local Similarity

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Query Match

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Matches 29
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                                                                                                                                             murine B- and T-cells but can express human immunity cells such as T-cells and monocytes in their peripheral lymphoid compartments. These mice are useful as models for the pathogenesis of human disease, e.g. for assaying the dissemination of HIV. The primers are used to assay the effect of HIV on cytokine gene expression e.g. as a model for human patients with HIV. The primers AAQ86376-7 are used to detect the expression of the interleukin-5 gene, using cDNA derived from mRNA extracted from the long bones of BCTD-HUBM mice. (Updated on 25-MAR-2003)
                                                                                                                                                                                                                                                           Primers AAQ86362-83 and AAQ87677-82 were used to detect the expression of various cycokines genes in HIV infected B-cell, T-cell deficient (BCTD) mice which have been transformed with human thymus, liver tissue and bone marrow implants (BCTD-huBM mice). These mice are immune-deficient for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Primer; PCR; amplification; human; cytokine gene expression; HIV; more B-cell; T-cell; thymus; liver; tissue implant; immunity; monocyte; more peripheral lymphoid compartment; pathogenesis; beta-2 microglobulin; peripheral blood mononuclear cell; spleen; lymph node; interleukin; tumour necrosis factor; leukemia inhibitory factor; granulocyte; macrophage; colony stimulating factor; bone marrow; ss.
                                                                                                          Sequence 29
                                                                                                                                                                                                                                                                                                                                                                       B-cell, T-cell deficient (BTCD) assaying pathogenesis of human
                                                                                                                                    extracted from the lo
                                                                                                                                                                                                                                                                                                                                 Example 8;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Goldstein H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-SEP-1993;
02-JUN-1994;
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05-DEC-1995
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                       2144 AGTAAACCAATTCCTAGACTACCTGCAAG 2172
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                                                                  Similarity
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                                                                                                                                                                                                                                                                                                                                Page
                                                   Conservative
                                                                                                         BP; 6 A; 4 C; 8
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(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Kollmann
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94US-00252773
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                                                                                                                                                                                                                                                                                                                                                                          disease
                                                                                                                                                                                                                                                                                                                                                                      chimeric mice - useful disease e.g. HIV-1, and
                                                   Mismatches
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and
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CC about 70% identical to the human conserved non-coding sequence (CNS)-1 clear region of chromosome 5931 containing interleukin (II) 4, ILS and CC IL 13). Optionally, the nucleic acid has 70% identity to a human CNS-2 to CC CNS-16 or mouse CNS-1 to CNS-16 or their complements. Also included are: CC (1) an expression cassette comprising a CNS-1 sequence operably linked to CRS-16 or mouse CNS-1 sequence; (3) an expression cassette comprising a CNS-1 sequence operably linked to CRS-16 or their complements. Also included are: CC (1) an expression cassette comprising a CNS-1 sequence operably linked to CRS-16 or their complements. Also included are: CRS-16 or comprising a CNS-1 sequence operably linked to CRS-16 or comprising an IL-13 gene, and a CNS-1 sequence; (3) an expression cassette comprising an IL-13 gene and a CNS-1 sequence; (4) an expression cassette comprising an IL-13 gene and lacking a CNS-1 sequence; (5) a T cell CC comprising one of the expression cassettes; (6) a non-human transgenic comprising one of the expression cassettes; (6) a non-human transgenic animal where a CNS-1 sequence; (5) a T cell; and (7) CC animal comprising one of the expression cassettes; (6) a non-human transgenic animal where a CNS-1 sequence is deleted from its CC compound. The nucleic acid is useful for identifying a compound that the transcription factor to a CNS-1 sequence, in antisones sequence of the CNS sequence, an antisones sequence of the CNS sequence, an antisones sequence of the CNS sequence, or a small compression. The compound is an antisones sequence of the CNS sequence, or a small compression cassette is sequence of the compound that modulating expression cassette is sequence of the CNS sequence. The compounds that modulate functions of CNS sequence is a cuseful for making two lines of non-human transgenic animals that compound is an expression cassette is sequence is a compound on a transgenic animals are useful as for various therapeutic modalities. The present sequence is a compound of the compound of the pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABX75428/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel isolated nucleic acids which are locus control region elements interleukin gene cluster region of chromosome, referred as conserved coding sequences, useful for modulating expression of cytokine genes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to an isolated nucleic acid molecule comprising length of about 100 nucleotides of less, which has a sequence at least
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2002132290-A1
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Matches 28; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cluster from chromosome 5q31 with and without CNS-1
                                                                                                                                                                                                                                    The present invention provides the protein and coding sequences of the canine interleukin-5 (IL-5) protein. This can be used to treat allergies, cancer and inflammatory reactions in dogs. The present sequence is a PCR primer used to obtain the sequences of the invention
                                                                                                                                                                                                                                                                                                                                                                       Guo H,
                                                                                                                                                                                                                                                                                                               Novel canine interleukin 5 polynucleotide and polypeptides are used generating antibodies which are useful in treating allergies in dogs
                                                                                                                                                                                                                                                                                                                                                                                                                                        09-AUG-2000; 2000WO-US021651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200111049-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Canine interleukin-5 coding sequence PCR primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF74303 standard;
 Human gene specific PCR primer #56.
                        02-JUL-2002
                                                                                                                                                                                                                Sequence 28
                                                                                                                                                                                                                                                                                            Disclosure;
                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-191542/19.
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                                             ABK65968;
                                                                  ABK65968 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DOG; interleukin-5; IL-5; allergy; cancer; gene therapy; inflammatory reaction; PCR primer; ss.
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                                                                                                                         1 CTGATTGTTAGAAATTATTCATTTCCTC 28
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                                                                                                                                    CTGATTGTTAGAAATTATTCATTTCCTC 467
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                                                                                                                                                                                                               BP; 7 A;
                                                                                                                                                                                                                                                                                          Page 47; 48pp; English
                                                                                                                                                                    Conservative
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100.0%; Pred. No.
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Pred. No. 51;
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CC acids (NAs) comprising contacting a NA sample from a physiological CC source, with a pool of 50 distinct gene specific primer bas a sequence complementary to a distinct mana. CC gene specific primer has a sequence complementary to a distinct mana. CC each labeled NA is generated using a single gene specific primer. The CC method is useful for producing a sub-population of labeled NAs which is CC useful for analysing the differences in the RNA profiles between several CC different physiological sources, where the method comprises producing CC subpopulation of labeled NAs for the different physiological sources, cC comprising the populations for each physiological sources, cC comprising the populations for each physiological sources, cC comprising the population, where the comparison is preferably CC performed by hybridising the labeled NAs for each of the distinct CC surface of a substrate to produce a hybridisation pattern for each of the sources, and comparing the patterns for each of the sources, where CC differential gene expression assays are utilised in differential content tissue or different tissue or subtissue types. The present sequence is a content sequence data for this patent did not form part of the printed content calculum, but was obtained in electronic format directly from USPTO at high the part and to content of the printed content calculum, but was obtained in electronic format directly from USPTO at high the population of content of the printed content calculum and the method of the printed content calculum and the method of the printed content calculum and only format directly from USPTO at high the pattern and the content of the printed content calculum and the method of the printed content calculum and the met
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to producing a sub-population of labeled nucleic
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at http.wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1
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Matches 28
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                                            Similarity
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                                           Score 28;
Pred. No.
                                   Mismatches
                                             DB 1;
51;
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Sequence 28

BP; 4

A; 9 C; 5 G; 10 T; 0 U; 0 Other;

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               Human; ss; PCR;
anticonvulsant;
Human; 88; PCR; primer; interleukin-5; neuroprotective; nootropic; anticonvulsant; cerebroprotective; antiparkinsonian; vulnerary; immunosuppressive; microglia cell line; autoimmune disease;
                                                      Human interleukin-5
                                                                               23-APR-2002
                                                                                                          ABK14340;
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neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;

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Matches 28
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15-MAY-2001;
22-JUN-2001;
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Interleukin-5; specific; cleavage; target RNA; protein; (inhibitor; inhibition; ribozyme; treatment; prophylaxis; psoriasis; asthma; inflammatory diseases; restensis; cardiovascular condition; hypertension; arthritis; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genetically modified human microglia cell for treating neurodegenerative disease, comprises demonstrable phagocytic properties, produces progeny in culture, presents surface antigens, and contains modified human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Huntington's disease; amyotrophic lateral sclerosis; stroke; spinal cord injury; ataxia; brain trauma; multiple sclerosis; acquired immunodeficiency syndrome; AIDS-dementia.
                                                                                                        25-MAR-2003
26-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                Sequence
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                                                                          Enzymatic RNA
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                                                                                                                                                                                                                                                                                         1975
                                                                                                                                                                                                                                                                                                                                                                                                              n microglia. The present sequence is an RT-PCR (reverse transcriptase primer which amplifies a segment of the mRNA for an expressed marker, used to characterise the cell line
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                                                                                                                                                                                   standard;
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2001US-00855468.
2001US-00887145.
                                                                         molecule IL-5 mRNA target sequence.
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RESULT 26
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Matches 27
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07-DEC-1992;
19-JAN-1993;
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                                                                                                                                         Concentrating gene; industrial enzyme screening; pharmaceutical; agrochemical; identification; parasitic; infectious; microorganism; disease diagnosis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                    Sequence 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Enzymatic RNA molecules which cleave mRNA - used to treat or inflammatory, arthritic, stenotic or cardiovascular diseases
                                                                18-DEC-2001;
                                                                                                                         Homo sapiens
                                                                                                                                                                                 Human IL5h
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92US-00989848.
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                   BIOMEDICAL RES
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, 100.0%; Pr
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RESULT 27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Real time PCR targeting IL-5 probe P104.
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                               WPI; 2003-598531/56
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                                                                                     Goldman M;
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27
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/mod_ba
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/note= "modified
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The present invention relates to a method of quantifying in vivo RNA from CC a biological sample. This involves collecting the biological sample in a cumpound inhibiting RNA degradation and/or gene CC induction, forming a precipitate comprising nucleic acids, separating the precipitate from the supernatant, dissolving the precipitate using a CC buffer, forming a suspension, isolating nucleic acids from the suspension of the precipitate using a compound inhibiting nucleic acids from the suspension of the precipitate using a natural formation (RT)-PCR using an automated device, dispersing or distributing a reagent mix for constraint of the nucleic acids isolated within the dispersed reagent mix constraints an automated device and determining the in vivo levels of transcripts using the nucleic acid solated within the dispersed reagent mix constraints and the nucleic acid and RT-PCR reagent mix of the previous step in an automated setup. The method is useful for monitoring or constraints and the suspension of the previous step in an automated setup. The method is useful for monitoring or constraints and accompanies in a biological sample or for producing a medicament for treating immune considered disease, e.g., autoimmunity, rheumatoid arthritis, multiple conjugated and constraints and and constraints allergy, grafit conjugated and constraints and and constraints and con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 medicament for treating immune rel
levels of transcripts using nuclei
reagent mix in an automated setup.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Quantifying in vivo RNA from a biological sample for producing a medicament for treating immune related disease by determining in v levels of transcripts using nucleic acid/reverse transcription-PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 42; 83pp; English.
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Example 1; Page 33; 62pp; Japanese.

present invention describes a method for concentrating

a gene in

amounts of (un)known genes, useful in screening industrial enzymes, pharmaceutical and agrochemical leads from nature. Method for concentrating trace genes expressed even in presence of large amounts of (un)known genes, useful in screening industrial enzymes, and WPI; 2002-508798/54.

trace amount from a DNA sample containing the gene by separating it from a gene in a large quantity comprises dividing the sample into driver and target DNA fractions, mixing and forming single-stranded DNAs from them, hybridisation to produce a double-stranded DNA, and repeating the steps. The method can be used for concentrating a trace amount of an expressed gene even from large amounts of a (un)known gene, which is useful in screening industrial enzymes, pharmaceutical and agrochemical leads from nature e.g. soil, river and lake water, as well as antibiotics, and identifying parasitic and infectious microorganisms for disease diagnosis. The present sequence represents a PCR primer which is used in

Sequence 27

BP; 6 A; 4 C; 5 G; 12 T; 0 U; 0 Other;

example from the present invention

Query Match Best Local (Matches Sequence 27 BP; 9 A; 10 C; 3 G; 5 T; 0 U; 0 Other; Local Similarity mes 27; Conserv Conservative 0.0%; Fi 100.0%; Fi Score 27; Pred. No. Mismatches DB 1; 0; Length 27 Indels <u>.</u> Gaps

0;

밁 5 612 CCCCACAGAATTCCCACAAGTGCATT 638 \vdash CCCCACAGAATTCCCACAAGTGCATT 27

RESULT 28
ABK65967
ID ABK65 Human gene 02-JUL-2002 ABK65967; ABK65967 standard; DNA; 26 specific PCR primer #55. (first entry) ВP

Primer; 88; DNA microarray; differential expression analysis; human

Homo sapiens

US6352829-B1

05-MAR-2002. 05-JAN-1999; 9908-00225928

21-MAY-1997; 97US-00859998

(CLON-) CLONTECH LAB INC.

Chenchik A, Jokhadze G, Bibilashvilli

WPI; 2002-314699/35.

Producing sub-population of labeled nucleic differences in RNA profiles between several sources, using set of distinct gene specific specific acids, useful for analyzing different physiological primers.

Example 3; SEQ ID NO 55; 11pp; English.

The invention relates to producing a sub-population of labeled nucleic

ďa.

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CC source, with a pool of 50 distinct gene specific primers under suitable conditions to enzymatically generate sub-population of NAs, where each compense specific primer has a sequence complementary to a distinct mRNA, and can be abeled NA is generated using a single gene specific primer. The competition of labeled NA is generated using a single gene specific primer. The competition of labeled NA is generated using a sub-population of labeled NAs which is useful for producing a sub-population of labeled NAs which is comprises producing subpopulation of labeled NAs for the different physiological sources, where the method comprises producing comprising the population, where the method comprises producing comprising the population, where the comparison is preferably comprising the population, where the comparison is preferably comprising the sources to an array of probe NAs stably associated with the sources, and comparing the patterns for each of the distinct courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and comparing the patterns for each of the sources, where courses, and courses, and courses, and courses, and courses, and co
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RESULT 29 AAZ55590/c 밁 Ş Matches Query Match Best Local S AAZ55590 standard; DNA; Sequence 26 BP; 5 A; 6 C; 7 G; 8 T; 0 U; 0 Other; 543 TTTCAGAGCCATGAGGATGCTTCTGC 568 26; بر Similarity TTTCAGAGCCATGAGGATGCTTCTGC 26 Conservative 0.8%; 27 0 Score 26; DB 1; Length 26; Pred. No. 62; Mismatches 0 Indels 0

NA CONTRACTOR OF THE CONTRACTO interferon-alpha; IFN-alpha; GMCSF; antibody; canine; feline granulocyte macrophage colony-stimulating factor; inhibitor; immune response; immunoregulation; tumour. Homo sapiens. Degenerate mammalian IL-5 antisense PCR primer 2, SEQ ID NO:136 vaccine; Chimeric Felis catus nterleukin; IL-4; IL-5; IL-13; Flt-3 ligand; CD40; CD40 ligand; CD154; immunoregulation; tumour; cancer; autoimmune disease feline;

15-SEP-2003 14-MAR-2000

(revised) (first entry)

WO9961618-A2

02-DEC-1999

28-MAY-1999; 99WO-US011942

(HESK-) HESKA

29-MAY-1998;

98US-0087306P

Sim G, Yang ŝ Dreitz MJ, Wonderling

WPI; 2000-072623/06

Nucleic acids encoding immunoregulatory proteins from cats or useful for treating or preventing e.g. tumors or autoimmune di

Example 5A; Page 106; 264pp; English

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The invention relates to canine interleukin-4 (IL-4), canine or feline CC Plt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40). CC ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha) CC and feline granulocyte macrophage colony-etimulating factor (GMCSF), and cucleotides which encode these immunoregulatory proteins. The proteins, cc used as vaccines for therapeutic or prophylactic antibodies and inhibitors may be used as vaccines for therapeutic or prophylactic regulation of an immune CC response in animals (particularly cats, dogs, horses and humans). They CC may be used to treat autoimmune or infectious diseases including CC calso be used for the recombinant production of a protein, while cas be used for the recombinant production of a protein, while CC cas sources of inhibitory therapeutics (e.g., antisense oligonucleotides). The proteins may be used to raise antibodies and to screen for modulators of activity, while the antibodies may be used in detection, and in drug targetting. Sequences AAZ55491-Z55498, AAZ55515 and AAZ55581-CC 255608 represent PCR primers used in isolation, amplification and cloning of cDNAs encoding the immunoregulatory proteins of the invention.

Sequence 27 BP; 3 A; 8 C; 3 G; 9 T; 0 U; 4 Other;

Query Match Best Local Matches 23; Similarity Conservative 0.8%; 4 Score 25.4; Pred. No. 7 Mismatches DB 1; 0 Length Indels 27; 0 Gaps 0

밁 ş 2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300 27 TGAGAATGAGGSCCAASMAAGRGTCAG 1

0

RESULT 30 AAT76224/c

AAT76224 standard; DNA; 25 ВP

12-SEP-1997 (first entry)

Human IL5 antisense oligonucleotide HUMIL5AS5.

Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleu interleukin; 88

Synthetic.

WO9640162-A1

19-DEC-1996.

96WO-US009306

06-JUN-1996; 07-JUN-1995; 95US-00474497

(UYEC-) UNIV EAST CAROLINA.

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WPI; 1997-051871/05.

Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of subject.

Claim 5; Page 31; 71pp; English.

A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMILSAS specific for the human IL5. The method can be used to treat airway HUMIL5AS5

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diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyper-

Query Match

Sequence 25 BP; 0 A;

14 C; 4 G; 0.8%;

7 T; 0 U; 0 Other;

DB 1:

Length 25;

airways

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RESULT 31

AAX54020/c

ID AAX54

AC AAX54

AC AAX54

AX AAX54

DT 05-JI

DE Human

XX Antina

KW Antina

KW Impa

KW Pulin

KW Pulin

KW Pulin

XX Byn

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Matches
The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX5512-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; brast cancer; lung cancer; pancreatic cancer; hepaticcellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human IL-5 antisense oligonucleotide fragment.
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09-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 49; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides used in treatment of, e.g. pulmonary
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The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenostriction, to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA33464 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                    Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2764 GGGGAGCAGGACACAGGCAGGAGG
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                                                                                                                                                                                                                                                                                                                                                                                                    Page 409; 1343pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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RESULT 33
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Best Local S
Matches 25
                                                                                                                                                                                                                                                                                                                                                                                                                                              Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA33992) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence
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                                                                                                                                                           WPI; 2000-679539/66.
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                                                                                                                                                                                                                                                                      06-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                     cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human IL5 polynucleotide fragment #1153.
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Pred. No.
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The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base

Low adenosine (A) content antisense oligonucleotides which adenosine receptors during metabolism, useful e.g. for trea and respiratory obstructions.

treating 0

not trigger ng cancers

Claim 14; Page 208; 1592pp; English.

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Best Local
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                                                                                                 10-JUL-2000;
15-MAY-2001;
22-JUN-2001;
                                                                                                                                                                                                                                                                                                           Huntington's disease; amyotrophic lateral sclerosis; stroke; spinal cord injury; ataxia; brain trauma; multiple sclerosis; acquired immunodeficiency syndrome; AIDS-dementia.
                                                                                                                                                                                                                                                                                                                                                                anticonvulsant; cerebroprotective; antiparkinsonian; vulnerary; immunosuppressive; microglia cell line; autoimmune disease; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
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WPI; 2002-148175/19
                                                                                                                                                                       09-JUL-2001; 2001WO-IB001770
                                                                                                                                                                                                                                            WO200204604-A2
                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                  Human; ss; PCR; primer; interleukin-5; neuroprotective; nootropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human interleukin-5 sense PCR primer.
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                                                                  (UYBR-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       present invention
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; 2001US-00887145.
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69;
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     RESULT 35
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Best Local S
Matches 25
                                                                                                                                                                                                                                                                                                                                                                         Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human IL-5 antisense fragment no.1144.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-OCT-2003
Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                               24-APR-2001; 2001US-0286137P
                                                                                                                                                                                                                                                                       31-OCT-2002
                                                                                                                                                                                                                                                                                                       WO200285308-A2
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                                                                                                                                                            (EPIG-) EPIGENESIS PHARM INC
                                                                         2003-229219/22
                                                                                                                                                                                                                                                                                                                                          sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          555 GAGGATGCTTCTGCATTTGAGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25;
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                                                                                                         Li Y,
Tang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 4 A; 3 C; 8 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22; 46pp; English.
                                                                                                          ŗ
                                                                                                         Sandrasagra A,
L, Shahabuddin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₽P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 25;
Pred. No.
                                                                                                       , Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      579
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                                                                                                                             Pabalan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                           Query Match
Best Local S
Matches 25
                                                                                                                                                                                                                                                                                                                                                    junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or the prophylactic or the sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of beinguinone or the prophylactic or the sensitivity to adenosine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a novel pharmaceutical composition, which has first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5 or 3 end genomic flanking regions, 5 and 3 intron-exon junctions, or regions within 2-10 nucleotides of
                                                                                                                                                                                                                                                                lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; SEQ ID
                                                                                                                                                                                            Sequence 25
                                                                                                                                                                                                                                         at ftp.wipo.int/pub/published_pct_sequences
                                           2764
25
                                                                                                                    Similarity
                           GGGGAGCAGGGACACAGGCAGGAGG
GGGGAGCAGGACACAGGCAGGAGG 1
                                                                                              Conservative
                                                                                                                                                                                            BP; 0 A; 14 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NO 10522;
                                                                                                               100.0%;
                                                                                                                                              0.8%;
                                                                                           0;
                                                                                                                    Score 25;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 872pp; English.
                                                                                                Mismatches
                                                2788
                                                                                                                                           DB 1;
                                                                                              0
                                                                                                                                           Length
                                                                                                Indels
                                                                                                0
                                                                                                Gaps
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RESULT 36 ABD19254/c ABD19254 standard; 29-JUL-2004 ABD19254; (first DNA; entry) 25 ВP

0

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antisthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ds. Human IL5 DNA fragment 1144.

Homo sapiens.

WO200285309-A2

23-APR-2002; 2002WO-US013143

24-APR-2001; 2001US-0286036P

EPIGENESIS PHARM INC

ŝ Li Y, Tang Ļ Sandrasagra A, Shahabuddin ŝ Katz Pabalan 'n Aguilar D;

WPI; 2003-093058/08

Pharmaceutical composition for treating asthma, has antisense

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RESULT 37
AAT75363
ID AAT75
XX AAT75
XX AAT75
XX AAT75
XX CDNA
XX 88; I)
KW 88; I)
KW cent1
XX Syntl
PN WO97;
XX WO97;
XX PD 31-JI
XX PR 24-J,
XX PR 24-J,
XX PR 17-J
XX PA (GEN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CC surfactant depletion or hyposecretion, when administered to a mammal. The Coligonucleotides are derived from a gene encoding or regulating cexpression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. CC The invention also describes a kit, that comprises: (a) a delivery cd device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition confidence of the corresponding mRNA. CC instructions for adding a carrier and for use of the kit. The composition confidence of the kit. The composition confidence or composition of the composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung cinflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vascoonstriction, confidence of the machinest present in the target mRNA or to the stress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymdines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system of the oligonucleotides into products that free adenosine into the system of the content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system of the content of the anti-sense oligos corresponding to the oligonucleotides into products that free adenosine into the system of the content of the anti-sense environment and thereby, to prevent any unwanted effects due to 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, aller reducing adenosine sensitivity, levels of adenosine (A) or
                                            26-JAN-1996;
17-JUL-1996;
                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                        ss; human;
                                                                                                                                                                                                                                                                                                                                                cDNA synthesis primer IL5-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT75363 standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention describes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 15; SEQ ID NO 10522; 763pp; English
                                                                                                           24-JAN-1997;
                                                                                                                                                                                                WO9727284-A2
                                                                                                                                                                                                                                                                                   central nervous
                                                                                                                                                                                                                                                                                                                                                                                             24-DEC-1998
    (GENE-) GENELABS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2764
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGGAGCAGGACACAGGCAGGAGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGGAGCAGGACACAGGCAGGAGG 2788
                                                                                                                                                                                                                                                                             RAD50; DNA repair; tumour rvous system; PCR; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             вP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                            96US-00592126
96US-00687080
                                                                                                             97WO-US001299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0 A;
      TECHNOLOGIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 25; DB 1;
Pred. No. 69;
0; Mismatches
                                                                                                                                                                                                                                                                               suppression; cancer; Septin-2;
amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 25;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     first active agent,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        allergies
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        receptors,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
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of the invention. Disclosed in the invention is human RAD50 (hRAD50) which is involved in DNA repair and has tumour suppression activity, and can be used to detect predisposition to decrease the risk of or treat cancers, e.g. acute myeloid leukaemia, myelodysplastic syndrome, therapy related myelodysplastic syndrome, therapy related acute myeloid leukaemia, refractory anaemia with excess blasts. Also disclosed in this invention are human Septin-2 homologues which may be used as targets for cancer therapies and central nervous system directed treatment methods, and to measure the proliferative potential of selected cell types
                                                                                                                                                                                                                                                                                                      Human tumour suppressor gene RAD50 - useful to detect predisposition decrease risk of and treat cancer, also Septin-2 homologues.
Sequence 24 BP; 9 A;
                                                                                                                                                                                                                                                                     Example 1;
                                                                                                                                                                                                                                                                                                                                                                                                        Dolganov
                                                                                                                                                                                                                                                                     Page
                                                                                                                                                                                                                                                                     36; 195pp; English.
7 C; 4 G; 4 T; 0 U; 0 Other;
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AAV59943
AAV59943
AAV59943
AAV59943
AAV59943
AC AAV59
AC AAC AAV59
AC AAC AAV59
AC A
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV59945;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV59945 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human analogue; yeast RAD50; Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCR primer IL5-1 used to amplify interleukin cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-NOV-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mmunomodulacory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1883 CACCAACTGTGCACTGAAGAAATC 1906
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACCAACTGTGCACTGAAGAAATC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            identification;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Septin-2; Acyl-CoA s
on; activated T-cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 76;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetase;
l; cytokine;
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PCR primers AAV59945-46 were used to identify cDNA encoding human cytokine interleukin (IL) from different cDNA pools, to provide an estimate of the degree to which the cytokine transcript is present. was isolated from activated T-cells, and converted to cDNA prior to

mRNA

Novel RAD50

ဝူ human

Drosophila

immunomodulatory poly:peptide(s) psophila Septin-2 proteins.

have

homology to the yeast

WPI; 1998-481207/41.

Dolganov

GENELABS TECHNOLOGIES

Example 1;

Page

27;

155pp; English.

03-SEP-1998.

WO9838306-A1

27-FEB-1997;

97WO-US003159 97WO-US003159

Synthetic.

Homo sapiens

interluekin;

PCR primer; ss.

밁 Ś

0.7%;

DB 1; Length 24;

amplification.

The specification describes sequences encoding human

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RESULT 39
AAT50760
ID AAT50
XX AAT50
XX AAT50
XX Cytok
KW Cytok
KW lives
KW lives
KW lives
KW secre
XX Synth
XX W097(
XX W097(
XX W14-JI
PN 03-JJ
XX W14-JI
PR 14-JI
PR 27-O(
XX W14-JI
PR 27-O(
XX WDI;
XX WOJ;
XX WO
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Best Local Sim:
Matches 24;
                 The sequences given in AAT50760-69 are primers which were used to amplify the sequences encoding ovine interleukin-5 (II-5), and interleukin-12 (II-7) and interleukin-12 (II-7) and interleukin-12 (II-7) are used to treat and/or prevent infections in livestock (esp. cows and sheep), particularly where the animals are stressed, e.g. during transport. II-5 and III-12 can also be used as adjuvants in vaccines for veterinary use (partic. weakly immunogenic subunit or synthetic peptide vaccines). They may also be used to treat cancer, immunosuppression and allergy, to enhance/suppress the reproductive system and to promote growth or early maturity. Optionally interleukin can be delivered from constructs or delivery cells and antibodies are useful in enzyme immunoassays for rapid diagnosis of infection. The interleukins are immunopotentiators, especially II-5 promotes growth of early haematopoietic progenitor cells and generation of a further archive colls for the progenitor cells and generation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        analogues of the yeast RAD50, the Drosophila Septin-2 and Acyl-CoA synthetase. The proteins have immunomodulatory activity. The nucleic acids and proteins can be used to identify activated T-cells in a sample population. They can also be used to isolate and identify sequences encoding other proteins or other compounds having immunomodulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-JAN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        immunosuppression; allergy; reproductive system; growth; early maturity;
antibody; diagnosis; immunopotentiator; PCR; amplify;
early haematopoietic progenitor cell; cytotoxic cell; thymocyte;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ovine IL-5 gene forward primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT50760 standard; cDNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-JUN-1995;
27-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         secretion; IgM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cytokine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CSIR ) COMMONWEALTH SCI & IND RES ORG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ytokine; ovine; sheep; interleukin-5; interleukin-12; IL-5; IL-12; ivestock; cow; stress; transport; vaccine adjuvant; veterinary; ca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1883 CACCAACTGTGCACTGAAGAAATC 1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACCAACTGTGCACTGAAGAAATC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Page 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP; 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
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95AU-00006244.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96WO-AU000360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IgA; bacterial endotoxin; gamma-interferon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; 7 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      78pp; English
   thymocytes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
also it stimulates production and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
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                                               Query Match
Best Local Sim
Matches 23;
                                                                                                 Sequence 23
                                                                                                                                                induces production of cells and increases th
                                                                                                                                                                          secretion of IgM and IgA (in synergism with bacterial endotoxin). IL-12
                       514
H
                                                            Similarity
                       CTTTCTTTGCCAAAGGCAAACGC 536
 CTTTCTTTGCCAAAGGCAAACGC 23
                                                                                                                                 roduction of gamma-interferon by, and proliferation of, T an
increases the (non-)specific cytolytic lymphocyte response.
onstructs can also be used for in vitro production of IL-5 o
                                                                                               BP; 6 A; 7 C; 4 G; 6 T; 0 U; 0
                                                Conservative
                                            100.0%; F1
                                                          Score 23;
; Pred. No.
                                                 Mismatches
                                                            DB
84;
                                                                         <u>, 1</u>
                                                                                                   Other;
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                                                                          Length
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Mus sp Mouse; ss; competitive ABS52410 standard; DNA; 23 08-AUG-2002 WO200261140-A2 Mouse ABS52410 Interleukin 5, PCR; primer; interleukin-5; IL-5; diferentiation domain; population normalisation; nucleic acid quantitation. (first entry) IL-5, PCR primer #2 ВP

31-JAN-2002; 2002WO-US002892 31-JAN-2001; 2001US-0265695P (AMBI-) AMBION INC

Brown

Winkler MM

WPI; 2002-619268/66.

their abundance, by competitive population molecules) normalization. ng one or more nucleic acid targets within two or more samples for the competitive analysis of nucleic acid samples regardless (containing the target of.

Example 1; Page 63; 106pp; English.

RESULT 40
ABS52410/G
ID ABS52240/G
ID ABS522
XX ABS52
XX MOUSE
XX MFI;
XX Comp.
PT Comp.
PT Comp.
PT WILL
XX MINI
X The invention relates to comparing one or more nucleic acid targets within two or more samples comprising converting two or more complex concelled acid samples into a single collection of normalised target collection of normalised target collection of normalised target collection of normalised target inthe acid samples. The method comprises: (a) obtaining at cleast a first nucleic and a second sample, each (potentially) having at comprise a first nucleic acid target; (b) preparing at least a first tagged comprising a first differentiation domain to the first nucleic acid tagged comprising a first sample (if the first nucleic acid target is present in the first sample); (c) preparing at least a second tagged nucleic acid carget of the first sample (if the first nucleic acid target is present in the first nucleic acid target is present condessed and comparing at least a second nucleic acid target of the second differentiation domain to the first nucleic acid target of the second condessed sample (if the first nucleic acid target is present in the second condessed sample); (d) mixing the first tagged nucleic acid sample and the second condessed nucleic acid sample mixture; (e) adding a complementation of at least a first target specific primer to the sample mixture by a process comprising and the sample mixture by a process comprising and the sample mixture by a process comprising concentration of at least a first target specific primer to the sample mixture by a process comprising and concentration of at least a first target specific primer to the sample mixture by a process comprising and concentration of at least a first product a limited concentration of at least a first target specific primer to the sample mixture by a process comprising and concentration of at least a first target specific primer to the sample mixture by a process comprising and concentration of at least a se nucleic acids complementary

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RESULT 41
ABS63333/c
ID ABS63
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         transpet of the first sample, if the first nucleic acid target is present in the first sample, and a limited concentration of second product nucleic acids complementary to the first nucleic acid target of the second sample, if the first nucleic acid target is present in the second sample, where any first product nucleic acids comprise the first differentiation domain and a section of the first nucleic acid target from the first sample and any second product nucleic acids comprise the second differentiation domain and a section of the first nucleic acid target from the second sample; (g) differentiating any first product nucleic acids from any second product nucleic acids; if any, the amount of the first nucleic acid target in the first sample, if any, the amount of the first nucleic acid target in the second sample, if any, the method is useful for comparing one or more nucleic acid targets within two or more samples, or the competitive analysis nucleic acid camples and is particularly useful for amplifying rare or limiting amounts of nucleic acid sequences for quantitative analysis. The present sequence is a PCR primer used to amplify mouse interleukin cONA in order to make a membrane bound array for use in an experiment demonstrating the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 23
                                                                                                                                         Comparing one or more nucleic acid targets within two or more san hybridizing the samples into target fractions then amplification nucleic acid target quantification.
                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR; primer; nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                    WPI; 2002-619271/66.
                                                                                                                                                                                                                                                             (AMBI-)
                                                                                                                                                                                                                                                                                        31-JAN-2001; 2001US-0265692P
                                                                                                                                                                                                                                                                                                                     31-JAN-2002; 2002WO-US003169
                                                                                                                                                                                                                                                                                                                                                                             WO200261145-A2
                                                                                                                                                                                                                                                                                                                                                                                                        Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Interleukin-5
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                                                                                                                                                                                                                                ₹,
                                                                                                                                                                                                                                                             AMBION INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGGAGAAGGACATTTTACTGC 2271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAGGAGAAGGACATTTTACTGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 5 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                               Brown
                                                                                                                                                                                                                                                                                                                                                                                                                                   target
                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleic acid amplification; 88; interleukin-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer #2
                                                                                                                                                                                                                               Ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                     detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23
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Pred. No.
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                                                                                                                                                                    samples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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This invention relates to a novel method for comparing one or more nucleic acid targets within two or more samples. The method comprises preparing a sample mixture by obtaining at least a first sample and a second sample, each potentially with at least a first nucleic acid target and mixing the first nucleic acid sample to create a sample mixture. The method of the invention is useful for fractionating nucleic acid samples into target fractions then using

Query Match Best Local S Matches 23

l Similarity 23; Conserv

0.7%; ilarity 95.8%; Conservative

Pred. No. 1e+0 0; Mismatches

1e+02;

Length

27;

Indels

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Sequence

27

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Page 53;

84pp;

English

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RESULT 42
AAX99415
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Best Local S
Matches 23
                   This artificial sequence is an oligomer containing the palindromic sequence from human interleukin 5 (hIL-5) promoter. These oligomers can be used as inhibitors of transcription of cytokines. They can be used in the therapy of a disease associated with excessive production in vivo of a cytokine, the gene for which corresponds to the palindrome-containing sequence in (I) in its 5'-non-coding region, or which can be alleviated by reducing the production in vivo of the cytokine (claimed). In particular, the cytokine may be interleukin-5 (IL-5) and the associated disease is asthma or the cytokine may be tumour necrosis factor- alpha and the associated disease is rheumatoid arthritis (claimed). They can also be used for treating e.g. allergy, chronic obstructive airways disease, inflammation, autoimmune diseases, cancer, angina, fibrosis, wound scarring, septic shock syndrome or excessive cellular proliferation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Artificial from hIL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic acids amplification to quantitatively assess target within each fraction. This method as compared facilitates the analysis of more target sequences to acid profiles of limited tissue samples. The present a PCR primer used in the method of the invention
                                                                                                                                                                                                                                         New double stranded DNA oligomers, transcription for treating, e.g. a
                                                                                                                                                                                                                                                                                                                                                                22-JAN-1998;
11-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                               Disclosure; Page 11; 33pp; English.
                                                                                                                                                                                                                                                                                 WPI; 1999-458690/38
                                                                                                                                                                                                                                                                                                         Eagles PAM,
                                                                                                                                                                                                                                                                                                                                                                                                         20-JAN-1999;
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                                                                                                                                                                                                                                                                                                                                       (BTGI-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          interleukin;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          n; palindrome; oligomer; arthritis; inhibition; o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequence of promoter.
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                                                                                                                                                                                                                                                                                                           Zheng RQ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
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98GB-00024794.
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                                                                                                                                                                                                                                                                                                                                        LTD.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
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100.0%; Prr
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                an oligomer containing the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; 3 G; 7 T; 0 U; 0 Other;
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e.g. asthma
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inflammation;
                                                                                                                                                                                                                                           for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB
84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ۲.
                                                                                                                                                                                                                                           inhibiting rheumatoid
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to prior art meth
determine nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence represents
                                                                                                                                                                                                                                           cytokine
arthritis
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RESULT 43
AAQ57190
RESULT 44
AAQ57194
ID AAQ5
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AC AAQ5
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AC AAQ5
XX
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                                                                                                                                                  Query Match
Best Local Similarity
Matches 22; Conserv
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07-DEC-1992;
07-DEC-1992;
07-DEC-1992;
                                                                                                                                                                                                                    This is an IL-5 mRNA target sequence (nucleotide no. 33) of an enzymati RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a psoriatic or asthmatic condition. The concm. of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of action is higher. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Interleukin-5; specific; cleavage; target RNA; protein; expression; inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention psoriasis; asthma; inflammatory diseases; restenosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-MAR-2003
26-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ57190;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ57190 standard;
                                                                                                                                                                                               Sequence 22 BP; 5 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-FEB-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cardiovascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Enzymatic RNA molecule IL-5 mRNA target sequence.
                                                                                                                                                                                                                                                                                                                                        Enzymatic RNA molecules which cleave mRNA - used to treat or inflammatory, arthritic, stenotic or cardiovascular diseases
                                                                                                                                                                                                                                                                                                                                                                           WPI; 1994-048853/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-JUL-1993;
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  25-MAR-2003
                        AAQ57194;
                                             AAQ57194 standard; mRNA;
                                                                                                                                                                                                                                                                                                      Claim 3; Page 17; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC
                                                                     44
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                                                                                                      CGTTTCAGAGCCATGAGGATGC 22
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(first en
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92US-00987132.
92US-00989848.
92US-00989849.
93US-00008895.
                                                                                                                                                                                                                                                                                                                                                                                                Draper KG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          condition; hypertension; arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93WO-US006316
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07-DEC-1992;
07-DEC-1992;
19-JAN-1993;
                                                                                                     Sequence 22
                                                                                                                          This is an II-5 mRNA target sequence (nucleotide no. 158) of an enzymat RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of a psoriatic or asthmatic condition. The concm. of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of action is higher. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                             Enzymatic RNA molecules which cleave mRNA - used to treat or inflammatory, arthritic, stenotic or cardiovascular diseases conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Interleukin-5; specific; cleavage; target RNA; protein; expression; inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention; psoriasis; asthma; inflammatory diseases; restenosis; cardiovascular condition; hypertension; arthritis; ss.
                                                                                                                                                                                                                    Claim 3; Page 17; 65pp; English.
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92US-00987132.
92US-00989848.
92US-00989849.
93US-00008895.
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Pred. No.
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RESULT 45
AAQ74032/c
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                                                                                  AAQ74031-Q74032 are primers used for the amplification of human interleukin-5 (AAQ74056). They are used for the delation of this sequence. The primers have the advantage sensitivity and reliability and are useful in the pharmaceutical
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RESULT 47
AAVO1432
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AC AAVO1
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Best Local S
Matches 22
PCR; polymerase chain reaction; primer; amplify; beta-actin; IL-2; IL-4; interferon-gamma; interleukin-2; peripheral blood mononuclear cell; IL-5; granulocyte macrophage colony stimulating factor; GM-CSF; cytokine; PBMC; CDB cell; T-cell; cell mediated immunity; cytotoxic; CD45RA; IL-10; HIV; surface marker; naive T-cell; thymus; proliferative response; antibody; cognate antigen; immuno-compromised; cancer; viral infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is human CLEO, which was used as control in an assay of human interleukin-5 (hII-5) promoter palindromic regulatory element (PREI) activity. PREI inhibits the activity of the hII-5 promoter and therefore II-5 expression. PREI can be used to modulate II-5 activity by acting on the corresponding region of the hII-5 promoter, especially in cases of asthma and eosinophilia or in immunocompromised subjects. PREI specifically inhibits transcription from the II-5 promoter, as no such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
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                                                                                                                                                                                                                                                               Interleukin-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      expresses the CD4SRA surface marker, and make a relatively poor cytokine response after T-cell receptor stimulation. Naive T-cells are cells which have recently emigrated from the thymus and have a predominantly proliferative response when exposed to cognate antigens for the first time. These primers can be used in the method of the invention. The method of the invention is for evaluating the efficacy of a drug to stimulate the production of naive T-cells. The method comprises obtaining a sample containing peripheral blood mononuclear cells from a subject. A suitable dose of a drug is then administered before a second sample is obtained. The T-cells in each populations are then isolated from the samples. The number of naive T-cells in each population is then determined by detecting T-cell immunoreactivity with at least 2 antibodies, selectively calls in the second population is significantly greater than the number in the first, then the drug is identified as being effective. The method can be used to identify naive T-cell count elevating drugs, particularly in immuno-compromised subjects, e.g. HIV positive subjects, cancer patients or individuals with viral infection or autoimmune disease
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Best Local :
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                                                                  Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleukin; ss
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Best Local S
Matches 22
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                                                                                                                                                                         acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; panoreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis
                                                                                                                                                                                                                                                                 Antisense oligonucleotide; multiple target; antisense treatm impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis;
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17-SEP-1997;
09-JUN-1998;
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                                                                                                                                                                                                                                                                                                                           Human IL-5 antisense oligonucleotide fragment.
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to airway epithelium of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                               metastasis;
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AAA33465/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX55272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases pulmonary vasoconstriction, inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as levkenias 1/mphonas, carcinomas e. colon cancer, breast cancer, lung cancer, pancreatic cancer, colon cancer, breast cancer, lung cancer, melanoma, hepatic metastases, hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, well as all types of cancers which may metastasize or have metastasized well as all types of cancers which may metastasize or have
                                                                                                                                                                                                                                                         phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
                                                                                                                                                                                                                       respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                 03-AUG-1998;
                                                     03-AUG-1999;
                                                                                           24-FEB-2000.
                                                                                                                                WO200009525-A2
                                                                                                                                                                                                                                                                                                                                          Human; adenosine receptor; low adenosine antisense
                                                                                                                                                                                                                                                                                                                                                                              Low adenosine antisense oligonucleotide SEQ ID NO:1154.
                                                                                                                                                                                                                                                                                                                                                                                                                        28-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA33465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The specification describes antisense oligonucleotides (AAX52869-X55271)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 49; 120pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-229400/19.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the lungs, including breast and prostate cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAGAGGAAGCCAGAAACCCTC 3018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                     99WO-US017712
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Α,
                                                                                                                                                                                                          lymphoma; carcinoma; metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6 G; 9 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ore 22; DB 1; Length 22; red. No. 92; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0 Other;
                                                                                                                                                                                                                                                                                                                                          oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      metastases,
metastasized
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cc impeded respiration, respiratory distress syndrame, pain, cystic (fibrosis, pilmonary hypertension, emphysema, chronic obstructive cultive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, cc carcinomas, and cancers which may metastasise to the lungs, including carcinomas, and cancers which may metastasise to the lungs, including cc breast and prostate cancer. The A-containing ONs break down with the cc Ns reduces side effects. The A-containing ONs break down with the cc branchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present thrention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 2815, and then the last 185 cf. com the previously named sequences. SEQ ID NO:1 to 1680 (AAA32323 to CAAA3392) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match cup with their corresponding SEQ ID NO: sequences given in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes a new composition comprising an antisense oligonuclectide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired already, including lung diseases and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, and the conditions of the conditions 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nyce
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-205971/18
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밁 Ś Query Match Best Local S Matches 22 2997 AGAGAGGAAGCCAGAAACCCCTC 3018 22 Similarity Conservative 100.0%; 0.7%; 0 Score 22; Pred. No. Mismatches DB 1; Length 22; 92; ٥, Indels 0 Gaps

0

Sequence

22 BP; 1

A; 6 C; 6 G; 9 T; 0 U; 0 Other;

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RESULT 52
AAF19587/c
                                          AAF19587 standard; DNA; 22 BP
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polynucleotide fragment #1154.

14-MAR-2001 AAF19587

(first entry)

Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; alrway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction, pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysems; pulmonary transplantation rejection; pulmonary hypertension; emphysems; pulmonary transplantation rejection; chronic obstructive cancer; ss. pulmonary n rejection; bronchitie;

WO200062736-A2

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RESULT 53
AAF25544
ID AAF25
XX AAF25
XX AAF25
XX O4-AE
DT 04-AE
XX Multi
XX Multi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with lung/respiratory disorders and malignancies, such as stimulating and cativating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central nervous and non-nervous system (CNS) and peripheral nervous and non-nervous system receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or
                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           condition selected from pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), nulmonary transplants in characterism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             adenosine receptors during metabolism, and respiratory obstructions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-679539/66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-MAR-2000; 2000WO-US008020
  Multiplex PCR; detection; amplification; probe; PIRS; leukemia;
                                       Multiplex PCR primer IL-5-exup.
                                                                                04-APR-2001
                                                                                                                                                            AAF25544 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pulmonary transplantation rejection, pulmonary infections, bronchitis,
and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes low adenosine (A) content antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 14; Page 208; 1592pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYEC-) UNIV EAST CAROLINA (NYCE/) NYCE J W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            fragments and antisense oligonucleotides used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                               2997 AGAGAGGAAGCCAGAAACCCTC 3018
                                                                                                                                                                                                                                                              22
                                                                                                                                                                                                                                                                                                                                        22;
                                                                                                                                                                                                                                                                                                                                                                                                                  22 BP; 1 A;
                                                                                                                                                                                                                                                              AGAGAGGAAGCCAGAAACCCTC
                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                              (first entry)
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                                                                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                  6 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                           0.7%;
                                                                                                                                                            22
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Pred. No.
                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                             DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human polynucleotide
                                                                                                                                                                                                                                                                                                                                                                             Length 22;
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Query Match
Best Local S
Matches 22
                                                                                 This invention describes a novel method for the detection of products of a nucleic acid (NA) amplification reaction (AR) using at least 2 primers where one of the primers (I) contains a 5'-homo-tail sequence, a probe binding sequence designated a primer-integrated reporter sequence (PIRS) and a sequence specific for the NA to be amplified, and a labeled probe (III). The method is used for the diagnosis of diseases, especially leukemia, meningitis, encephalitis or cytokine response. The need for expensive probe oligonucleotide additives is avoided
                                                                                                                                                                                                                                        Detecting products of nucleic acid amplification, useful for diagnosis of e.g. leukemia, comprising two primers, one containing a primer-integrated reporter sequence, and labeled probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      primer-integrated reporter sequence; meningitis; encephalitis;
                                                             Sequence 22 BP; 7 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                    WPI; 2001-072123/09
                                                                                                                                                                                                                                                                                                                             Repp R,
                                                                                                                                                                                                                                                                                                                                                         (REPP/)
(RASC/)
                                                                                                                                                                                                                                                                                                                                                                                                   02-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                             02-JUN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytokine response; primer; ss.
                                                                                                                                                                                                                                                                                                                                                         REPP R.
RASCHER
                                                                                                                                                                                                                3; Page 12; 22pp; German.
                    Similarity
                                                                                                                                                                                                                                                                                                                             Rascher W;
       Conservative
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0.7%; oc.
100.0%; Pr
                    Score 22;
Pred. No.
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92;
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        Indels
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                                                                                                                                                           2 primers,
a probe
       Gaps
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RESULT 54
AAF25545/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Multiplex PCR; detection; amplification; probe; PIRS; leukemia; primer-integrated reporter sequence; meningitis; encephalitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-APR-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytokine response; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Multiplex PCR primer IL-5-exdo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF25545 standard;
                                           (REPP/) REPP R. (RASC/) RASCHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DE19925448-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1909 TCAGGGAATAGGCACACTGGAG 1930
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                                                                                                                                    Nyce JW,
Miller S,
                                                                                                                                                                                                                                                                                                                  Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                              Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                               WPI; 2003-229219/22.
                                                                                                                                                                                          24-APR-2001; 2001US-0286137P
                                                                                                                                                                                                                23-APR-2002; 2002WO-US013135
                                                                                                                                                                                                                                        31-OCT-2002.
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                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                        Human
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                                                                                                                                                                       (EPIG-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2178
                                                                                                                                                                                                                                                                                                         inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                      IL-5 antisense fragment no.1145.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22; Conserv
                                                                                                                                                                       EPIGENESIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTGGTGTAATGAACACCGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard;
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Tang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTGGTGTAATGAACACCGAGT 1
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(larity 100.0%;
Conservative (
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                                                                                                                                    Sandrasagra A,
L, Shahabuddin
                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                       PHARM INC.
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                                                                                                                                    Katz
S;
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cc inntiation codon, coding region, 5' or 3' end genomic flanking regions, CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of CC junctions of genes encoding a polypoptide associated with lung and/or CC nasal airway dysfunction and a second active agent comprising an CC antiinflammatory steroid and ubiquinone. A composition of the invention CC has antiinflammatory, antiallargic, antisathmatic, hypotensive, CC immunosuppressive, and cytostatic activity. The composition may have a CC use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also CC for enhancing the prophylactic or therapeutic respiratory effect of an CC antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine CC receptor, producing bronchodilation, increasing levels of adenosine CC lung surfactant in a subject's tissue, or treating bronchoconstriction, CC lung inflammation, lung allergies, or a respiratory disease or condition. CC Note: The sequence data for this pattent is not represented in the printed Specification, but was obtained in electronic format directly from WIPO CC at ftp.wipo.int/pub/published_pct_sequences

SXCCCCCCCCXSXPTTXXXX

Example

ű,

Page 12; 22pp; German

This invention describes a novel method for the detection of products of a nucleic acid (NA) amplification reaction (AR) using at least 2 primers, where one of the primers (I) contains a 5'-homo-tail sequence, a probe binding sequence designated a primer-integrated reporter sequence (PIRS) and a sequence specific for the NA to be amplified, and a labeled probe (III). The method is used for the diagnosis of diseases, especially leukemia, meningitis, encephalitis or cytokine response. The need for expensive probe oligonucleotide additives is avoided

Detecting products of nucleic acid amplification, useful for diagnosis e.g. leukemia, comprising two primers, one containing a primer-integrat reporter sequence, and labeled probe.

a primer-integrated

Query Match Best Local :

Sequence

22

B₽;

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4 G; 6 T;

0 U;

Score 22; Pred. No.

DB 1; 92; 0 Other;

Length 22;

Sequence 22 BP; 1 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

Query Match Best Local S Matches 22 Similarity Conservative 0.7%; 0, Score 22; Pred. No. Mismatches DB 1; 92; 0 Length 22; Indels 0 Gaps 0

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ABD19255/c RESULT 56 ABD19255 standard; (first DNA;

Human

IL5 DNA

fragment 1145.

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; bronchitis; pulmonary transplantation rejection; ds.

Homo sapiens.

WO200285309-A2

31-OCT-2002.

23-APR-2002; 2002WO-US013143

24-APR-2001; 2001US-0286036P

(EPIG-) EPIGENESIS PHARM INC

Nyce JW, Miller S ŝ Li Y, Tang ŗ Sandrasagra A, L, Shahabuddin , Katz. m Pabalan Aguilar

Ö

WPI;

Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, an bronchodilating agent ő

Claim 15; SEQ ID NO 10523; 763pp; English

The invention relates to a novel first active agent comprising an

comprising

an

pharmaceutical oligonucleotide

composition, antisense to

which

has

Disclosure; SEQ ID NO 10523; 872pp; English

ubiquinone

44.

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AAQ86376
ID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CC expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery comprises: (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition comprises: (c) instructions for adding a carrier and for use of the kit. The composition comprises: (c) analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The composition such as pulmonary vasoconstriction are associated with a disease or condition such as pulmonary vasoconstriction are associated with a disease or condition such as pulmonary vasoconstriction, respiratory composition, allergies, asthma, impeded respiration, respiratory composition, allergies, asthma, impeded respiration, respiratory composition, allergies, asthma, impeded respiration, respiratory composition such as pulmonary vasoconstriction are associated with a disease or condition such as pulmonary vasoconstriction are associated with a disease or condition such as pulmonary vasoconstriction composition, allergies, asthma, impeded respiration, respiratory composition, allergies, asthma, impeded respiration, respiratory pulmonary infections, bronchitis or cancer.

The reduced adenosine content of the anti-sense oligos corresponding to the oligonary brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) recept surfactant depletion or hyposecretion, when administered to a mammal oligonucleotides are derived from a gene encoding or regulating
                                                                                                                                                                                                                                                                                                             peripheral lymphoid compartment; pathogenesis; beta-2 microglobulin; peripheral lymphoid compartment; pathogenesis; beta-2 microglobulin; peripheral blood mononuclear cell; spleen; lymph node; interleukin; tumour necrosis factor; leukemia inhibitory factor; granulocyte; macrophage.
                                                                                                                                                                                                                                                                                                                                                                                             Primer; PCR; amplification; human; cytokine gene expression; HIV; mouse; B-ceil; T-cell; thymus; liver; tissue implant; immunity; monocyte; model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
05-DEC-1995
                                                             28-SEP-1993;
02-JUN-1994;
                                                                                                                             28-SEP-1994;
                                                                                                                                                                         06-APR-1995
                                                                                                                                                                                                                    WO9509235-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Interleukin-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ86376 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes a novel composition (a) a first active agent,
                    (YESH ) UNIV YESHIVA EINSTEIN COLLEGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22
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22; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAGAGGAAGCCAGAAACCCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 1 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           detection PCR primer #1 in BCTD-huBM mice.
                                                             93US-00127880.
94US-00252773.
                                                                                                                             94WO-US010957
                                                                                                                                                                                                                                                                                                    stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6 C; 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 22;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0 Other;
                                                                                                                                                                                                                                                                                                        factor; granulocyte;
marrow; ss.
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(A) or (A) receptors,
The
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Query Match
Best Local
Matches
                                                                                                          various cytokines genes in HIV infected B-cell, T-cell deficient (BCTI marce which have been transformed with human thymus, liver tissue and I marrow implants (BCTD-huBM mice). These mice are immune-deficient for murine B- and T-cells but can express human immunity cells such as T-cells and monocytes in their peripheral lymphoid compartments. These rare useful as models for the pathogenesis of human disease, e.g. for assaying the dissemination of HIV. The primers are used to assay the effect of HIV on cytokine gene expression e.g. as a model for human patients with HIV. The primers AAQ86376-7 are used to detect the expression of the interleukin-5 gene, using cDNA derived from mRNA extracted from the long bones of BCTD-HuBM mice. (Updated on 25-MAR-2)
                                                                                                                                                                                                                                                                                                                                                                                        B-cell, T-cell deficient assaving pathogenesis of
                                                                                                                                                                                                                                                                                                       Primers AAQ86362-83 and
                                                                                                                                                                                                                                                                                                                                         Example 8; Page
                                                                                                                                                                                                                                                                                                                                                                                      assaying pathogenesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Goldstein H,
                                                                                                   correct PN field.)
 21;
                 Similarity
                                                                    21
                                                                  BP; 2
 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kollmann
                                                                                                                                                                                                                                                                                                                                       57; 86pp; English.
                                                                  A; 6 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                        33 and AAQ87677-82 were used to genes in HIV infected B-cell, T
               100.0%;
                                 0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               됬
                                                                                                                                                                                                                                                                                                                                                                                        (BTCD) chimeric mice - useful human disease e.g. HIV-1, and
 0
                                   Score
                   Pred.
   Mismatches
                   . 21;
                                   DB 1; Length 21;
                     1e+02;
   0,
                                                                                                                                                                                                                                                                          detect the expression of T-cell deficient (BCTD) us, liver tissue and bone
                                                                                                                       (Updated on 25-MAR-2003
   Indels
                                                                                                                                                                                                                                                                                                                                                                                           as model
defficacy
   0
                                                                                                                                                                                                                          These mice
   Gaps
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RESULT 58
AAT38974
ID AAT38 AAT38974 standard; 29-MAY-1997 577 TTGCTAGCTCTTGGAGCTGCC 597 _ Trectaecretreeaecrece 21 (first DNA; entry) 21 ВP

0

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Cytokine; expression profile; genital wart; interleukin 12; IL-12; tumour regression; adjuvant; polymerase chain reaction; PCR; condyloma acuminata; human papilloma virus; HPV-6; HPV-11; HPV16; anogenital; cutaneous; laryngeal; oesophageal; cancer; ss. 26-SEP-1996. Synthetic

HPV16; HPV18;

Interleukin IL-5 5' PCR primer.

22-MAR-1996; 96WO-GB000686

22-MAR-1995; 95GB-00005784

VIND CAMBRIDGE TECH SERVICES GLT

Stanley MA, Scarpini දු

WPI; 1996-442947/44.

Use of interleukin-12 as a vaccine adjuvant or tumours. to treat papilloma virus-associated lesions - with papilloma virus antigen for immuno:therap immuno:therapy

Disclosure; Page 14; 32pp; English.

RNA was extracted from genital lesions, reverse transcribed to produce

laryngeal and oesophageal cancers

21

BP; 4 A;

3 C; 6 G; 8 T; 0 U; 0 Other;

21

cDNA and then the cDNA was used as the template for PCR amplification of various cytokines using the primers in AAT39964- AAT39905. To confirm the identity of amplified cDNA, digoxigenin-labelled probes specific for each cytokine (see AAT3906-T39021) were hybridised with Southern blots of amplified sequences. The expression profile for regressing and non-regressing warts was established and compared to cytokine expression patterns in normal cervical tissue. Results showed that interleukin 12 is barely expressed (if at all) in non-regressing warts, but is expressed in regressing warts. This suggests a central role for IL-12 in wart regression. It has been found that IL-12 can be used (especially as a vaccine adjuvant) for treating papilloma virus-sesociated lesions such as condyloma acuminata (anogenital warts) caused by human papilloma virus sesociated with HPV16 and/or HPV-11 and more generally for treatment of tumours associated with HPV16 and HPV18 infection e.g. anogenital, cutaneous,

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RESULT 59
AAV01427
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Best Local
                               The present sequence is the human interleukin-5 (hIL-5) promoter wild type palindromic regulatory element (wtPRI), which inhibits the activity of the hIL-5 promoter and therefore IL-5 expression. wtPRI can be used to modulate IL-5 activity by acting on the corresponding region of the hIL-5 promoter, especially in cases of asthma and eosinophilia or in immuncompromised subjects. wtPRI specifically inhibits transcription from the IL-5 promoter, as no such sequence is present in genes encoding
                                                                                                                                      Example
                                                                                                                                                                           gene expression,
                                                                                                                                                                                                                             WPI; 1997-470871/43.
                                                                                                                                                                                                                                                     Sanderson CJ,
                                                                                                                                                                                                                                                                                                                                14-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                         18-SEP-1997.
                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                   inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV01427;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        553
                                                                                                                                                                                                                                                                                                                                                                                                                                  interleukin-5; IL-5; palindromic regulatory element; promoter;
tion; modulation; asthma; eosinophilia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ATGAGGATGCTTCTGCATTTG 21
                                                                                                                                                                                                                                                                                WVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                        acid sequence that inhibits activity of the interleukin-5 r - and proteins that interact with this sequence to modulate IL-5 pression, for treating asthma, eosinophilla or immune-compromised
                                                                                                                                    4; Page 14; 50pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGAGGATGCTTCTGCATTTG 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard; DNA;
                                                                                                                                                                                                                                                                                TELETHON INST CHILD
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ilarity 100.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        wild
                                                                                                                                                                                                                                                       Mordvinov
                                                                                                                                                                                                                                                                                                        96AU-00008691
                                                                                                                                                                                                                                                                                                                                97WO-AU000162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       type palindromic regulatory element, wtPRE1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21
                                                                                                                                                                                                                                                       ۷A;
                                                                                                                                      English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,</u>
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Pred. No.
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Sequence

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0 Other

AAT75364/c
ID AAT753:
XX
AC AAT753:

AAT75364 standard; cDNA; 21

βP

RESULT

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RESULT 60
AAT76221/c
ID AAT76221 standard;
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                                                     Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                            A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMILSAS2 specific for the human ILS. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON,
                                                                                                                                                                                                                                                                                 Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of
                                                                                        Sequence
                                                                                                                       its liberation upon antisense degradation is prepreventing adenosine-induced bronchoconstriction
                                                                                                                                                                                                                                                                                                                                                                                                            06-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleukin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT76221;
                                                                                                                                                                                                                                                                         subject.
                                                                                                                                                                                                                                                                                                                                          Мусе JW,
                                                                                                                                                                                                                                                                                                                                                                                       07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                  19-DEC-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human IL5 antisense oligonucleotide HUMIL5AS2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                (UYEC-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9640162-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                     522 GCCAAAGGCAAACGCAGAACG
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                                                                                                                                                                                                                                                   <u>ن</u>
21
                                           21;
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                                                                                                            airways
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GCCAAAGGCAAACGCAGAACG 1
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                                           Conservative
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                                                                                        0
                                                                                       A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA; 21
                                        100.0%;
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6
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                                           Score 21; DB; Pred. No. 1e+
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Pred. No.
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                                                                                       T; 0 U; 0 Other;
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                                                                DB 1;
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                                                       1e+02;
                                                                                                                                 prevented,
                                                                Length 21;
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                                                                                                                                                                                                                                                RESULT 62
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Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                                                                                                           The primers AAT75354-T75378 were used to for cDNA synthesis in the method of the invention. Disclosed in the invention is human RAD50 (hRAD50) which is involved in DNA repair and has tumour suppression activity, and can be used to detect predisposition to, decrease the risk of or treat cancers, e.g. acute myeloid leukaemia, myelodysplastic syndrome, therapy related myelodysplastic syndrome, therapy related acute myeloid leukaemia, refractory anaemia or refractory anaemia with excess blasts. Also disclosed in this invention are human Septin-2 homologues which may be used as targets for cancer therapies and central nervous system directed treatment methods, and to measure the proliferative potential of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ss; human; RAD50; DNA repair; tumour suppression; cancer; Septin-2; central nervous system; PCR; primer; amplification.
                                                                                                                                                                                                                                                                                                                                                                                          Sequence 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human tumour suppressor gene RAD50 - useful to detect predisposition decrease risk of and treat cancer, also Septin-2 homologues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-393672/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-JUL-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-DEC-1998
                                                                                                   Human analogue; yeast RAD50; Drosophila Septin-2; Acyl-CoA synthetase; immunomodulatory activity; identification; activated T-cell; cytokine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-JAN-1996;
17-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-JAN-1997;
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    03-SEP-1998
                            W09838306-A1
                                                                   Synthetic
                                                                                                                                          PCR primer IL4-2 used to amplify interleukin cDNA
                                                                                                                                                                    25-NOV-1998
                                                                                                                                                                                                                       AAV59946 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                   selected cell types
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example
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                                                     Homo sapiens
                                                                                           interluekin;
                                                                                                                                                                                                                                                                                                             2181 GGTGTAATGAACACCGAGTGG 2201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthesis
                                                                                                                                                                                                                                                                                      21
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                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                      GGTGTAATGAACACCGAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Page 36; 195pp; English
                                                                                                                                                                                                                                                                                                                                                                                        BP; 4 A;
                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                           IL;
                                                                                                                                                                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96US-00592126.
96US-00687080.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97WO-US001299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TECHNOLOGIES INC
                                                                                        PCR primer; ss.
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                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                0.7%;
                                                                                                                                                                                                                                                                                                                                                                                          C; 3
                                                                                                                                                                                                                        ₽P
                                                                                                                                                                                                                                                                                                                                                                                          G; 6
                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                   Score 21; DB 1; Length 21; Pred. No. 1e+02;
                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                          T; 0
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                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                           Other;
                                                                                                                                                                                                                                                                                                                                        0
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AAX54017/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; en
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amplification. The specification describes sequences encoding human analogues of the yeast RADSO, the Drosophila Septin-2 and Acyl-CoA synthetase. The proteins have immunomodulatory activity. The nucleic acids and proteins can be used to identify activated T-cells in a sample population. They can also be used to isolate and identify sequences encoding other proteins or other compounds having immunomodulatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                              chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 4 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR primers AAV59945-46 were used to identify cDNA encoding human cytokine interleukin (IL) from different cDNA pools, to provide an estimate of the degree to which the cytokine transcript is present. was isolated from activated T-cells, and converted to cDNA prior to converted to cDNA prior to converte to cDNA prior to 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel human immunomodulatory poly:peptide(s) RAD50 or Drosophila Septin-2 proteins.
                                                                              17-SEP-1997;
09-JUN-1998;
                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human IL-5 antisense oligonucleotide fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX54017;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX54017 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Page 27; 155pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-FEB-1997;
                                                                                                                                                                                                                       25-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                          prostate cancer; ss.
                                                                                                                                                                                                                                                                           WO9913886-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (GENE-) GENELABS TECHNOLOGIES INC.
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                                                                              97US-0059160P.
98US-00093972.
                                                                                                                                                                  98WO-US019419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.7%; 5c.
100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 21;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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    have homology to

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  emphysema;
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(UYEC-) UNIV EAST CAROLINA.

Nyce

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RESULT 64
AAA33461/c
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e. colon cancer, breast cancer, lung cancer, pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastasses, well as all types of cancers which may metastasize or have metastasized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The proteins associated with one or more diseases, conditions or mixtures. The proteins associated with one or more diseases from sequences AAX55272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of
                                                                                                                                                                                                                                                                Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA33461 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and
                                                                   03-AUG-1998;
                                                                                                       03-AUG-1999;
                                                                                                                                                                               WO200009525-A2
                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                     pulmonary hypertension;
cancer; leukaemia; lympl
                                                                                                                                                                                                                                                                                                                                                                                                                   Low adenosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides used in
                                 (UYEC-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the lungs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCAAAGGCAAACGCAGAACG 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                   EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                   antisense oligonucleotide SEQ ID NO:1150.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               including breast and prostate cancer
                                                                   98US-0095212E
                                                                                                     99WO-US017712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0 A;
                                                                                                                                                                                                                                                     lymphoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6 C; 6 G; 9 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 21;
Pred. No.
                                                                                                                                                                                                                                                      carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a8
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The present invention describes a new composition comprising an antisense coligonuclect acids (ON) with low adenosine (up to 15%), which targets concleic acids involved in bronchconstriction, allergies, and/or continuation. The ON can have antiinflammatory, antiallergie, and/or constituent of diseases associated with inflammation, conspositions are cuseful for the treatment of diseases associated with inflammation, conspositions are consisted alivays, including lung disease and diseases whose secondary consisted alivays, including lung disease and diseases whose secondary consisted alivays, including lung disease and diseases whose secondary consisted alivays, including lung disease and diseases whose secondary consisted and conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive confidency and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the conclusions of the adenosine content of the nucleotide sequences given in the sequence listing from the present the nucleotide sequences given in the sequence listing from the present the present on the present on the present invention, which correspond to SEQ ID NO:1 to 1815, but the sequences differ from the previously named sequences. SEQ ID NO:1 to 180 (AAA32313 to AAA32313 to AAA33313 to 
New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 408; 1343pp; English.
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밁 Ś Matches Query Match Local 522 GCCAAAGGCAAACGCAGAACG 542 21 21; Similarity GCCAAAGGCAAACGCAGAACG 1 Conservative 0.7%; <u>,</u> Score 21; Pred. No. Mismatches DB 1; Length 21; 1e+02; Indels 0 Gaps 0

Sequence

21

вр;

0 A.

σ

C; 6 G; 9 T; 0 U; 0 Other;

AAF19583 standard; DNA; 21 ВP

AAF19583;

14-MAR-2001

(first entry)

Human IL5 polynucleotide fragment #1150.

RESULT 65
AAF19583/c
ID AAF195
XX AAF195
XX AAF195
XX Human
I 14-MAR
XX Low ad
KW human;
KW surfaci
KW immunou
KW respira
KW chroni
Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pul chronic obstructive pulmonary disease; 88. pulmonary transplantation

Homo sapiens

WO200062736-A2

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RESULT 66
ABS52409
ID ABS52
XX ABS52
XX ABS52
XX ABS52
XX ABS52
XX Mouse
XX Mus & Mu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes low adenosine (A) content antisense CC oligonucleotides and compositions (I) comprising them. In the antisense CC oligonucleotides the A is replaced by a 'Universal' or alternative base. CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the CC expression and or activity of target polypeptides associated with CC lung/respiratory disorders and malignancies, such as stimulating and CI cativating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and CC chemokines, endogenously produced specific and non-specific enzymes, Chinding proteins, adhesion molecules and their receptors, cytokine and CC chemokine receptors, adenosine receptors, bradykinin receptors, central cravous system (CNS) and peripheral nervous and non-nervous system peptide transmitters, brinding proteins and malignancy associated proteins. The CC condition respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or CC condition selected from pulmonary vasociated with a disease or condition selected from pulmonary vasociated with a disease or condition selected from pulmonary vasociated with a bronchitis.

CC pulmonary transmitation, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary bronchitis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                              Mouse; ss; PCR; primer; interleukin-5; \text{IL-5}; diferentiation domacompetitive population normalisation; nucleic acid quantitation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pulmonary transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 14; Page 208; 1592pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-679539/66
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                                                                                                                                                                        Mouse Interleukin 5,
                                                                                                                                                                                                                                                                                                                          ABS52409
                                                                                                                                                                                                                                                                                                                                                                                        ABS52409 standard; DNA; 21
                                                                                                                                                                                                                                                 15-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          522 GCCAAAGGCAAACGCAGAACG 542
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000WO-US008020.
                                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.7%;
                                                                                                                                                                        IL-5,
                                                                                                                                                                        PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                        ВÞ
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                                                                                                      domain;
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672 TCGAACTCTGCTGATAGCCAA 692

Query Match Best Local S Matches 21

Local Similarity

0.7%;

Score 21; DB 1; Pred. No. 1e+02; Mismatches

DB 1;

Length 21; Indels

Conservative

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Gaps

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Sequence 21

B₽;

6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

make a

invention

bound array for use

in an experiment

demonstrating

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CC within two or more samples comparising converting two or more complex (CC nucleic acid samples into a single collection of normalised target molecules that can be used to compare the abundance of each of the colleast a first the original samples. The method comprises: (a) obtaining at CC least a first sample and a second sample, each (potentially) having at CC nucleic acid sample by appending at least a first nucleic acid target; (b) preparing at least a first tagged CC comprising a first differentiation domain to the first nucleic acid target of the first sample (if the first nucleic acid target is present (CC in the first sample); (c) preparing at least a first nucleic acid carget is present (CC sample); (d) mixing the first nucleic acid target is present (CC sample); (d) mixing the first nucleic acid target is present (CC sample); (d) mixing the first nucleic acid target of the second sample (if the first sample to create a sample mixture; (e) adding a CC limiting concentration of at least a first target apecific primer to the CC sample mixture; (f) processing the sample mixture by a process comprising at least a first nucleic acid target of the CC sample mixture; (f) processing the sample mixture by a process comprising CC at least a first sample, and a limited concentration of CC first product nucleic acid sample product nucleic acid target of the concentration of the first sample, if the first nucleic acid target is present (CC sample, where any first product nucleic acid sample to create a second second product nucleic acid sample and the second sample, if the first nucleic acid scomprise the cCC sample, where any first product nucleic acid scomprise the cCC sample, where any first nucleic acid target is present (CC sample, where any first nucleic acid sacids comprise the cCC sample, where any first nucleic acid target in the first acid target in the second sample, if any, (CC mixture) acid target of the second sample, if any, (CC mixture) acid sequences for quantitative analysis nucleic acid target (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to comparing one or more nucleic acid targets
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   molecules) normalization.
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CC within two or more samples comparising converting two or more complex conditions of normalised target collection of normalised target collections that can be used to compare the abundance of each of the teargets in the original samples. The method comprises: (a) obtaining at CC least a first uncleic acid target; (b) preparing at least a first uncleic acid target; (b) preparing at least a first uncleic acid target; (b) preparing at least a second target of the first sample (if the first nucleic acid target is present compares they appending at least a second target is present comparising a first target is present comparising at least a second target is present comparising at least a second target is present conditions as a second differentiation domain to the first nucleic acid target of the comparising at least a second target of the comparising at least a second target of the comparison of at least a second target of the comparison of at least a second target of the comparison of at least a first target specific primer to the caped nucleic acid sample mixture; (f) processing the sample mixture; (e) adding a complementary to the first mucleic acid target is present in the second capet of the first sample, if the first nucleic acid target is present comparison of at least a first target specific primer to the capet of the first sample, if the first nucleic acid target is present comparison of the first nucleic acid target is present comparison of the first nucleic acid target is present comparison.

CC sample where any first product nucleic acid target in the second capet from the first sample, if the first nucleic acid target nucleic acid sample; (g) differentiating any first product carget from the second sample; (g) differentiating any first product carget from the second sample; (g) differentiative analysis. The present continued acid sample; (f) any, comparison of the first sample, if any, comparison of the comparison of the first sample; if any, comparison of the comparison of the first sample; if any, 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52421
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Comparing one or more nucleic acid targets within two or more samples useful for the competitive analysis of nucleic acid samples regardless their abundance, by competitive population (containing the target
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Best Local (
                                                                                                         Matches
                                                                                                                                                                                                                                                           This invention relates to a novel method for comparing one or more nucleic acid targets within two or more samples. The method comprises preparing a sample mixture by obtaining at least a first sample and a second sample, each potentially with at least a first nucleic acid target and mixing the first nucleic acid sample at least a first nucleic acid sample to create a sample mixture. The method of the invention is useful for fractionating nucleic acid samples into target fractions then using nucleic acid samples into target fractions then using nucleic acids amplification to quantitatively assess the nucleic acid target within each fraction. This method as compared to prior art methods facilitates the analysis of more target sequences to determine nucleic acid profiles of limited tissue samples. The present sequence represents a PCR primer used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Comparing one or more nucleic acid targets within two or more samples hybridizing the samples into target fractions then amplification prior
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR; primer;
nucleic acid
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                                                                                                                                                                                                                Sequence 21
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                                                                                                                                   Local
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                                  672 TCGAACTCTGCTGATAGCCAA
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Pred. No.
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1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABS63332 standard;
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                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Comparing one or more nucleic acid targets within two or more samples hybridizing the samples into target fractions then amplification prior
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                                                                                Real time PCR
                                                                                                           04-DEC-2003
                                                                                                                                      ACF04470
                                                                                                                                                              ACF04470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (AMBI-) AMBION INC
                                                                                                                                                                                                                                                                                                                                                                     PCR primer used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002-619271/66.
                                                                                                                                                                                                                                                           672
                                                                                                                                                                                                                                 \vdash
                                                                                                                                                                                                                                                                                      21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acid target
                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                 TCGAACTCTGCTGATAGCCAA 692
                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                standard;
                                                                                                                                                                                                                                TCGAACTCTGCTGATAGCCAA 21
                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                          BP; 6 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic acid amplification; ss; interleukin-5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Brown D;
                                                                                                          (first entry)
                                                                                targeting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  84pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             quantification.
                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                          6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                 0.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                IL-5
                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                      ٥,
                                                                                                                                                                                                                                                                                                  Score 21;
Pred. No.
                                                                                PCR primer R153.
                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                               DB 1; Length 21;
                                                                                                                                                                                                                                                                                                     1e+02;
                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                       Indels
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                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           prior to
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Nucleic acid level determination; PCR; primer; probe; DNA quantification; gene therapy; immunosuppressive; anti-HIV; antiarthritic;

cytostatic; antiallergic; ss

WO200285308-A2 Homo sapiens

Unidentified neuroprotective;

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ABZ95277/
ID ABZ9
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The present invention relates to a method of quantifying in vivo RNA from CC a biological sample. This involves collecting the biological sample in a CC tube comprising a compound inhibiting RNA degradation and/or gene CC induction, forming a precipitate comprising nucleic acids, separating the CC precipitate from the supernatant, dissolving the precipitate using a CC buffer, forming a suspension, isolating nucleic acids from the suspension CC using an automated device, dispersing or distributing a respent mix for CC distributing the nucleic acids isolated within the dispersence or CC distributing the nucleic acids isolated within the disperse reagent mix CC using an automated device and determining the in vivo levels of transcripts using the nucleic acid and RT-PCR reagent mix of the previous CC step in an automated setup. The method is useful for monitoring or CC detecting changes in in vivo nucleic acids levels in a biological agent CC present, such as eukaryotic or prokaryotic cells, viruses or phages in a CC biological sample or for producing a medicament for treating immune created setup. The minimum and attribe in the dispersion of the previous step in a such as a such as a such as a with a such as with a such as a with a such as with a such as a with a such as with a such as a with a su
                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 71
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Matches
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                                                                                                            Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sclerosis, cancer, immunodeficiencies such as AIDS, allergy, graft rejection or Graft versus Host Disease. The present sequence is a primer/probe used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 42; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Quantifying in vivo RNA from a biological sample for producing a medicament for treating immune related disease by determining in vilevels of transcripts using nucleic acid/reverse transcription-PCR reagent mix in an automated setup.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stordeur P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-JAN-2002; 2002EP-00447009
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 4 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ULBR
                                                                                                                                                                                                                                                                  Human IL-5 antisense fragment no.1141.
                                                                                                                                                                                                                                                                                                                                                                ABZ95277;
                                                                                                                                                                                                                                                                                                               17-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                ABZ95277 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
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                                                                                             inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          641 TGAAAGAGACCTTGGCACTGC 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21;
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                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                  entry)
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Pred. No.
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Gaps

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is a PCR

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RESULT 72
ABD19251/c
ID ABD192
XAXEXEXEXEXEXEXEX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cc junctions of genes encoding a polypeptide associated with lung and/or cnasal airway dysfunction and a second active agent comprising an extra control and ubiquinone. A composition of the invention cc antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a cuse in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also cor enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of adenosine constitution inflammation, lung allergies, or a respiratory disease or condition. Und surfactant in a subject, a tissue, or treating bronchoconstriction, increasing inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO cat figure is a subject, sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 21
                                              beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
                                                                                                  Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
                                                                                                                                                                                                  Human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a novel pharmaceutical composition, which he first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking region; and 3' intron-exon junctions, or regions within 2-10 nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-OCT-2002
                                                                                                                                                                                                                                                                                                             ABD19251 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; SEQ ID
                                pulmonary transplantation rejection;
                                                                                                                                                                                                                                      29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-APR-2001; 2001US-0286137P
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                                                                                                                                                                                                                                                                                                                                                                                                        21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Li Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    вP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                fragment 1141.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sandrasagra A,
y L, Shahabuddin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NO 10519;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6 C; 6 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.7%;
                                                                                                                                                                                                                                                                                                             ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 21;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
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sing an
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         regions,
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Homo sapiens

AAT50761/c
ID AAT507
XX
AC AAT507
XX
AC AAT507
XX
DT 24-SEP
XX

AAT50761

standard;

cDNA;

20 ВP

0

24-SEP-1997 AAT50761;

(first entry)

RESULT 73

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                                                                                                                                                                                          Cexpression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA.

Certain the invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, antiasthmatic, antiasthmatic, antiasthmatic, is a beta-adrenargic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The composition allergies and/or bronchoconstriction and/or lung luminary obstruction, allergies and/or bronchoconstriction and/or lung confident hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, confident and special confidence, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary thresholdines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system content on the free adenosine into the system content and effects due to the products and thereby, to prevent any unwarred effects due to the products and thereby, to
                                                                     Query Match
Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nyce JW,
Miller S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   bronchoconstriction, respiratory tract inflammation, allergies a reducing adenosine sensitivity, levels of adenosine (A) or (A) a surfactant depletion or hyposecretion, when administered to a me oligonucleotides are derived from a gene encoding or regulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                               Sequence 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes a novel composition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 15; SEQ ID NO 10519; 763pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-APR-2001; 2001US-0286036P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               comprising oligonucleotides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200285309-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (EPIG-)
                                  522 GCCAAAGGCAAACGCAGAACG 542
21
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                                                                                         Similarity
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Tang
                                                                                                                                               BP; 0
                                                                                                                                                                                    unwanted effects due to
                                                                       Conservative
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L, Shahabuddin
                                                                                                                                               A.
                                                                                       0.7%;
                                                                                                                                               6 C; 6 G; 9 T; 0 U;
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                                                                                         Score 21; DB 1;
Pred. No. 1e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               effective for alleviating
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                                                                       Mismatches
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                                                                                           1e+02;
                                                                                                                                               0 Other;
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                                                                                                          Length 21;
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RESULT 74
AAT76226/c
ID AAT762
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AC AAT762
XX
AC AAT762
XX
DT 12-SEP
XX
DE Human
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                                                                                                                                                                                                                                                                                                                          ·δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequences given in AAT50760-69 are primers which were used to amplify the sequences encoding ovine interleukin-5 (IL-5), and interleukin-12 (IL C -12) 35 kD subunit (partial and full length sequence) and the 40 kD cs subunit. Ovine IL-5 or IL-12 are used to treat and/or prevent infections compared to the sequence of the sequence
                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytokine; ovine; sheep; interleukin-5; interleukin-12; IL-5; IL-12; livestock; cow; stress; transport; vaccine adjuvant; veterinary; cancer; immunosuppression; allergy; reproductive system; growth; early maturity; antibody; diagnosis; immunopotentiator; PCR; amplify; early haematopoietic progenitor cell; cytotoxic cell; thymocyte; secretion; IgM; IgA; bacterial endotoxin; gamma-interferon; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine adjuvants and to treat or prevent microbial infections in livestock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-JAN-1997.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-JUN-1995;
27-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 23; 78pp; English
                                                                                                                                                                      AAT76226 standard; DNA; 20
                                                                          12-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CSIR ) COMMONWEALTH SCI & IND
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                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 BP; 3 A; 8
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                                                                     (first entry)
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95AU-00006244.
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                                                                                                                                                                                                                                                                                                                                                                                                       0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 primer.
                                                                                                                                                                      ВÞ
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                                                                                                                                                                                                                                                                                                                                                                                                          Score 20;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Le
. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
                                                                                                                                                                                                                                                                                                                                                                                      Indels
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Human ILS antisense oligonucleotide HUMILSAS7.

WO9913886-A1

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RESULT 75
AAX54022/c
ID AAX54
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                     Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation, allergic rhinitis; acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; colon cancer; breast cancer; lung cancer; pancreatic cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide HUMIISAS7 specific for the human II5. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyper-reactive airways
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A method for treating airway disease in a subject has been produced which involves the topical administration of an essentially adenosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 5; Page 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nyce JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
                                                                                                                                                                                                                                                   Human IL-5 antisense oligonucleotide fragment.
                                                                                                                                                                                                                                                                                  05-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-JUN-1995;
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                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                             AAX54022 standard;
                                                                         prostate
                                                                                        hepatocellular carcinoma; kidney cancer; melanoma; hepatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                             2
                                                                                                                                                                                                                                                                                                                                                                                                                                                         3064 AACAAAAGGACAGAGAGACA 3083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                           AACAAAAGGACAGAGAGACA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Metzger WJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 0 A; 5 C; 3 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71pp;
                                                                                                                                                                                                                                                                                                                                             DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 20; pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
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                                                                                             metastasis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           adenosine
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AAA33466/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX5272-74. These multiple target oligonucleotides (specifically AAX52180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary of disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, bepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 20
                                                                                                                         Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; infilammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary yasoconstriction; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-1997;
09-JUN-1998;
                                                                                                                                                                                                                                                                     28-JUL-2000
                                                                                                                                                                                                                                                                                                                                     AAA33466 standard; DNA; 20 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-1999
                                            Homo sapiens.
                                                                                           respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD
                                                                                                                                                                                                                                    Low adenosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       vasoconstriction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYEC-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                        3064 AACAAAAGGACAGAGAGACA 3083
                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                               leukaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EAST CAROLINA
                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                  antisense oligonucleotide SEQ ID NO:1155
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98US-00093972.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Α,
                                                                             lymphoma; carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       treatment of,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; L
. 1.1e+02;
                                                                             metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gape
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The present invention describes a new composition comprising an antisense CC oligonuclectide (ON) with low adenosine (up to 15%), which targets cure nucleic acids involved in bronchoconstriction, allergies, and/or CC inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are cuseful for the treatment of diseases associated with inflammation, CC impaired airways, including lung disease and diseases whose secondary ce.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distease syndrome, pain, cystic cytiorest conditions, pulmonary vasoconstriction, allergies, asthma, cimpeded respiration, respiratory distress syndrome, pain, cystic cytiorests, pulmonary hypertension, emphysema, chronic obstructive carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the COMS reduces side effects. The A-containing ONS break down with the reluction and inflammation. AAA32313 to AAA35312 represent the mucleotion, which correspond to SEQ ID NO:1 to 2815, and then the last 185 cequences are also called SEQ ID NO:1 to 185, but the sequences differ C CAAA3392) are specifically claimed ONS from the present invention on the disclosure of the present invention do not match compatition of the present invention of the sequences given in the disclosure of the present invention do not match compatition of the present invention of the sequences given in the disclosure of the present invention do not match compatitions. The compatition of the present invention of the sequence differ compatitions of the present invention of the sequence size of the present invention of the sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nyce
  Sequence 20 BP; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 409; 1343pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0095212P
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A; 5 C; 3 G; 12 T; 0 U; 0 Other;
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AAC73702/c
ID AAC73702 standard; D
XX
AC AAC73702;
XX
DT 02-FEB-2001 (first of the content of th
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                             Human; interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                    antisense oligonucleotide; antiasthmatic;
IL-5 receptor-alpha; asthma; eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3064 AACAAAAGGACAGAGAGACA 3083
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACAAAAGGACAGAGAGACA 1
                                                                                                                                                                                                                                                                                                                                                                        antisense
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA;
                                                                                                                                                                                                                                                                                                                                                                   oligonucleotide ISIS #16087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                               88
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.1e+02;
                                                                                                                                                                                    immunosuppressive; cytostatic;
syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
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WO200009525-A2

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RESULT 78
AAC73705/c
ID AAC73
SON COCCOCCOCX BX FFX DRX PX RX FX BX BX FX BX F
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Matches 20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5.
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                                                WPI; 2000-594648/56
                                                                                                                                                                                                       26-MAR-1999;
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Antisense oligonucleotide compound used to treat asthma and eosinophilic

Query Match

Score

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Length

20;

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RESULT 79
AAC73708/c
ID AAC737
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Matches 20
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                                       The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; interleukin-5; IL-5; signal transduction;
antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
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Sequence
                            prevent or
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A; 8 C; 3
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G; 6 T; 0 U; 0 Other;
                             inflammation or tumour formation
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RESULT 80
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            02-FEB-2001
                                                                                                                                                                                                     Sequence
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20; Conserv
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                                                                                                               ATGCACTTTCTTTGCCAAAG 1
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Pred. No.
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Mismatches
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hes 0;
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syndrome; infection;
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RESULT 82 AAC73691/c ID AAC736

AAC73691 standard;

DNA;

20 BP

02-FEB-2001

(first entry)

AAC73691;

Human IL-5

antisense

oligonucleotide ISIS #16076.

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20

TCCTCTCCAGACTCTGAGGA 1

0

inflammation;

cancer; ss.

17-MAR-2000; 2000WO-US007318

05-OCT-2000.

WO200058512-A1

Synthetic

Homo sapiens

Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;

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                                                                        Query Match
                                                                                                                                 The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                                                                       Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                            Example 20; Page 64; 156pp; English.
                                                                                                                                                                                                                                                                                                        Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense oligonucleotide; antiasthmatic;
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                                                                                                                                                                                                                                                                                                                                                                                       Dean NM,
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895 TCCTCTCCAGACTCTGAGGA 914
                                             20;
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RESULT 83
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                                                                                                          Example
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                                                                                                     Page 63; 156pp; English.
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The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
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associated with IL-5 signal transduction, IL-5 expression or IL-5
receptor-alpha expression. Such diseases include asthma and eosin
syndrome: The oligonucleotides are also useful for research uses
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ATGCACTTTCTTTGCCAAAG
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AAC73713/c
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      antisense oligonucleotide; antisethmatic; immunos
IL-5 receptor-alpha; asthma; eosinophilic syndron
inflammation; cancer; ss.
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                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                            Indels
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                                                                                                                                                                                                                                                           Gaps
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WPI; 2000-594648/56

Dean NM,

Karras JG,

Mckay R;

(-SISI)

SISI

PHARM INC

26-MAR-1999;

99US-00280799

17-MAR-2000;

2000WO-US007318

05-OCT-2000

WO200058512-A1

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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                                                                                                                                                                           Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
Synthetic.
                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                               Human
                                                                                                                                                                                                                                                                   02-FEB-2001
                                                                                                                                                                                                                                                                                        AAC73699;
                                                                                                                                                                                                                                                                                                              AAC73699 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present of interleu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 20; Page 64; 156pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dean
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAR-1999;
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                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                        inflammation;
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                                                                                                                                                                                                 IL-5 receptor-alpha; asthma; eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-)
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                                                                                                                                                                                                                                               antisense
                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PHARM INC
                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                        cancer; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ence is an oligonucleotide used for antisense (IL-5) signal transduction Oligonia
                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                                                                                                             oligonucleotide ISIS #16084.
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                          1.1e+02;
                                                                                                                                                                                                 immunosuppressive; cytostatic;
syndrome; infection;
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Claim 4;

Page 63; 156pp;

English

Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.

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AAC73710/c
ID AAC73710
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Best Local Sim:
Matches 20;
                       The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20
                                                                                                                                                                                        Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense oligonucleotide; antiasthmatic;
IL-5 receptor-alpha; asthma; eosinophilic
inflammation; cancer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; interleukin-5; IL-5; signal transduction;
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                                                                                                                                                                                                                                                                  Karras JG,
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                                                                                                                                                          Page 64; 156pp; English.
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ilarity 100.0%;
Conservative
                                                                                                                                                                                                                                                                                               PHARM INC
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Pred. No.
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syndrome; infection;
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Sequence

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RESULT 90
AAC73715/c
ID AAC737
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AAC73715 standard;

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Query Match
Best Local Sin
Matches 20;
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AAC73712/c
ID AAC737
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Matches
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                                                                                                                            of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include astema and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
                                                                                                    Sequence 20
                                                                                                                                                                                                         The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
                                                                                                                                                                                                                                                                        Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
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                                                             Local
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                                                             Similarity
                                                                                                                                                                                                                                               20; Page 64; 156pp; English
                        CCAAAGGCAAACGCAGAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGTATTTTCCTCCAGGCAA 1
                                                                                                                                                                                                                                                                                                                                      Karras JG,
                                                                                                   BP; 0
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                                                   Conservative
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                                                             0.6%;
                                                                                                    5 C; 6 G; 9 T;
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                                                   Pred. No. 1.:
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1.1e+02;
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AAC73690/c
ID AAC736
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AC AAC736
AC AAC736
AX
DT 02-FEB
XX
Human;
KW Human;
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Best Local S
Matches 20
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                                                                                                                                                                         Human IL-5 antisense oligonucleotide ISIS #16075
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                05-OCT-2000
                                          WO200058512-A1
                                                                    Synthetic
                                                                                 Homo sapiens
                                                                                                                      IL-5 receptor-alpha; asthma; eosinophilic
                                                                                                                                 antisense oligonucleotide; antiasthmatic;
                                                                                                                                                  Human;
                                                                                                                                                                                                    02-FEB-2001
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                                                                                                         inflammation;
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                                                                                                                                                                                                                                                                                                                                                                                                                          BP;
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                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                 (first entry)
                                                                                                          cancer;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   infection, inflammation or tumour
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                                                                                                                                                                                                                                                     DNA;
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                                                                                                                                               IL-5; signal transduction;
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syndrome; infection;
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syndrome; infection;
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RESULT 92
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Best Local (
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                                                                                                                                                                                                                                                                                antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection; inflammation; cancer; ss.
                                              Antisense oligonucleotide compound used to syndrome in humans modulates interleukin-5
                                                                                                                                                                                                    05-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                    02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 7 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              prevent or delay infection, inflammation or tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                      26-MAR-1999;
                                                                                                                                                                            17-MAR-2000;
                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                    Human; interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                                                                                                                                                                             Human IL-5
                                                                                                                                                                                                                                                                                                                                                                                           AAC73693;
                                                                                                                                                                                                                                                                                                                                                                                                                  AAC73693 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-MAR-2000;
                                                                                                                                                                                                                          WO200058512-A1
                                                                                                                                                                                                                                                            Homo sapiens
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                                                                                                                               (-SISI)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
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                                                                                 2000-594648/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          857 TGAATGCTGGTGTGCTGTAA 876
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                                                                                                                               SISI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20; Page 63; 156pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGAATGCTGGTGTGCTGTAA 1
                                                                                                       Karras JG,
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                                                                                                                                                                                                                                                                                                                                             antisense
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                                                                                                                              PHARM INC
                                                                                                                                                                             2000WO-US007318.
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                                                                                                                                                                                                                                                                                                                                                                    (first
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                                                                                                                                                                                                                                                                                                                                                                                                                   DNA;
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                                                                                                                                                                                                                                                                                                                                             oligonucleotide ISIS #16078
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
                                            treat asthma and eosinophilic signal transduction.
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Example

20;

Page 63; 156pp;

English.

present sequence

is an oligonucleotide used

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Best Local S
Matches 20
                                       Query Match
Best Local (
                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13694,
                                                                                                   The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection; inflammation; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC73694 standard;
                                                                                                                                                                                                                                                    Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; interleukin-5; IL-5; signal transduction;
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                                                                              Sequence
                                                                                                                                                                                                                            Example 20; Page 63; 156pp; English.
                                                                                                                                                                                                                                                                                             WPI; 2000-594648/56
                                                                                                                                                                                                                                                                                                                                                                              26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                       17-MAR-2000; 2000WO-US007318
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TGATGGCATGAATAAGTAAA 983
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                                                                                                                                                                                                                                                                                                                       Karras JG,
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                                                                              BP; 5
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100.0%; Pro
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                                                                             5 C; 1 G; 9 T;
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                                       Score 20;
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BB
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; interleukin-5; IL-5; signal transduction;
antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
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Conservative 0;
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Human; interleukin-5; IL-5; signal transduction; Human IL-5 antisense oligonucleotide ISIS #16072.

antisense oligonucleotide; antiasthmatic;

IL-5 receptor-alpha; asthma;

eosinophilic

immunosuppressive;
syndrome; infectior

infection;

cytostatic;

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AAC73700
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Dean NM,
                                         26-MAR-1999;
                                                            17-MAR-2000; 2000WO-US007318
                                                                                  05-OCT-2000.
                                                                                                     WO200058512-A1
                                                                                                                                  Homo sapiens
                                                                                                                                                                           antisense oligonucleotide;
                                                                                                                                                                                                        Human IL-5 antisense oligonucleotide ISIS #16085.
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                                                                                                                                                               receptor-alpha; asthma; eosinophilic
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                                                                                                                                                                                     interleukin-5; IL-5; signal transduction;
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                    ISIS PHARM INC.
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                                                                                                                                                        cancer;
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                                         99US-00280799
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                                                                                                                                                                                                                                                                                                                                                                                                                         infection, inflammation or tumour formation
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                                                                                                                                                                                                                                                                      DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                       5 C; 6 G; 9 T;
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                                                                                                                                                                          antiasthmatic;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                      0 Other;
                                                                                                                                                                syndrome;
                                                                                                                                                                          immunosuppressive; cytostatic;
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                                                                                                                                                                 infection;
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                                                                                                                                                Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                        Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                     Claim 4; Page 63; 156pp; English.
                                                                                          Local
                                    1932 GTCAAACTGTGCAAGGGGGT 1951
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000-594648/56
 20
                                                                         20;
                                                                                            Similarity
 GTCAAACTGTGCAAGGGGGT
                                                                       Conservative
                                                                                            100.0%;
                                                                                                              0.6%;
                                                                         <u>.</u>
                                                                                                          Score 20;
                                                                                          Pred.
                                                                         Mismatches
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                                                                                                            DB 1;
                                                                                          1.1e+02;
                                                                                                            Length 20;
                                                                       Indels
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ARCSULT 97
AACTOTO
ID JACTOT
XX AACTOTO
AC IL-5 r
KW Human
XX IL-5 r
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CO Synthe
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ACTOTO
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antisense oligonucleotide; antiasthmatic; immuno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-FEB-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IL-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    eosinophilic syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic;
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Synthetic inflammation; IL-5 receptor-alpha; asthma; sapiens cancer; 88.

05-OCT-2000. WO200058512-A1.

17-MAR-2000; 2000WO-US007318

26-MAR-1999; 99US-00280799

(ISIS-) ISIS PHARM INC.

¥, Karras JG,

WPI; 2000-594648/56

Antisense oligonucleotide com syndrome in humans modulates compound used to treat asthma and eo eosinophilic

Example 20; Page 63; 156pp; English.

The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation

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ARESULT 98
AAC73696/G
ID 7A6C73
XX AAC73
XX AAC73
XX AAC73
XX DT 02-FE
XX Human
XX Human
XX Human
XX Homo
OS Homo
OS Synth
XX Synth
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PF 18-MA
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RESULT 99
AAC73716/c
ID AAC73716 standard;
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Best Local Sim
Matches 20;
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human IL-5 antisense oligonucleotide ISIS #16081.
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                                                                                                                                                                                         1407 TGCCTGGTCATATTAAAATG 1426
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                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                   or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Page 63; 156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ISIS PHARM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                 delay infection, inflammation or tumour
                                                                                                                                                                                                                                                                                                                                                              BP; 7
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llarity 100.0%;
Conservative
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%; Pred. No. 1.1
0; Mismatches
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Pred. No.
                                                                                                                                                                                                                                                             Mismatches
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1.1e+02;
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                                                                                                                                                                                                                                                                                  1.1e+02;
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Best Local S
Matches 20
                                                                                  Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno IL-5 receptor-alpha; asthma; eosinophilic syndro
                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                            Sequence
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                                                                                                                                   Human IL-5
                                                                                                                                                            02-FEB-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example
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                                                                                                                                                                                                              AAC73698 standard;
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                                                                       inflammation;
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                                                                                                                                                                                                                                                                                                                                                                          20 BP; 6 A;
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                                                                                                                                  antisense oligonucleotide ISIS #16083
                                                                                                                                                                                                                                                                                                                                                                                                  delay infection, inflammation or tumour formation
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syndrome; infection;
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                             antisense oligonucleotide; antiasthmatic; IL-5 receptor-alpha; asthma; eosinophilic
                                                                                                                                                                                                                                                                                                            Human IL-5 antisense oligonucleotide ISIS #16077.
                                                                                                                                                                                                                                                                                                                                    02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                AAC73692 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-OCT-2000
 Example
                     Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                       WPI; 2000-594648/56
                                                                                                                           26-MAR-1999;
                                                                                                                                                 17-MAR-2000; 2000WO-US007318
                                                                                                                                                                         05-OCT-2000.
                                                                                                                                                                                              WO200058512-A1.
                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                     inflammation;
                                                                                                                                                                                                                                                                                      Human; interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     prevent or delay infection, inflammation or tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-594648/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dean
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1873
                                                                               3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3
                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ISIS PHARM INC
 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                      SISI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTCATTTAGCACCAACTGT 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTCATTTAGCACCAACTGT 1
                                                                              Karras
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Karras
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B₽;
 Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                      PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000WO-US007318
                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                                                                                                                                      cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-00280799
                                                                                                                             99US-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                σ
 63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JG,
                                                                              ģ,
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                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 C; 7 G; 5 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        156pp; English
156pp; English
                                                                              Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mckay R;
                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; L
1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0 Other;
                                                                                                                                                                                                                                                              immunosuppressive; cytostatic;
syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
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Matches Best Local

20;

Conservative

0;

Mismatches

1.1e+02;

Indels

0

Gaps

0

DB 1;

Length 20;

Similarity

100.0%;

Score 20; Pred. No.

0.6%;

Query Match

Sequence

20

w P,

4 C;

4.

<u>ი</u>

9 T; 0 U;

0 Other;

The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation

Antisense oligonucleotide com syndrome in humans modulates

compound used to treat asthma and eosinophilic se interleukin-5 signal transduction.

WPI; 2000-594648/56

Dean NM,

Karras JG,

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Example

20; Page 64;

156pp; English

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RESULT 102
AAC73717/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha syndrome. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                    Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno
                                                                                                                                                                                                                                                                                                                                                                                    Human
                                                                                                                                                                                                                                                                                                                                                                                                        02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                          AAC73717;
                                                                                                                                                                                                                                                                                                                                                                                                                                             AAC73717 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                       26-MAR-1999;
                                                                                                                                                                                                                                          17-MAR-2000;
                                                                                                                                                                                                                                                              05-OCT-2000
                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                   (ISIS-)
                                                                                                                                                                                                                                                                                  WO200058512-A1
                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                  inflammation; cancer; ss.
                                                                                                                                                                                                                                                                                                                                            IL-5 receptor-alpha; asthma; eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          905 ACTCTGAGGATTCCTGTTCC 924
                                                                                                                                                                                                                                                                                                                                                                                     IL-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20;
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                                                                                                                                                                                                    ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCTGAGGATTCCTGTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               delay infection, inflammation or tumour formation
                                                                                                                                                                                                                                                                                                                                                                                    antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                           2000WO-US007318.
                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                       99US-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                                                                                                                                                                                                                                                                    oligonucleotide ISIS #16102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                              ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.1e+02;
                                                                                                                                                                                                                                                                                                                                            immunosuppressive; cytostatic;
syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>..</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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RESULT 103
AAC73689/c
ID AAC736
XX AAC736
XX AAC736
XX Human
XX Human;
KW Human;
KW inflam
XX Synthe
XX Synthe
XX W 17-MAH
XX HOMO 8
OS Synthe
XX W 17-MAH
XX HOMO 8
PR 26-MAH
XX LEAR
PR 17-MAH
XX LEAR
PR 26-MAH
RESULT 104
AAC73707/c
ID AAC737
XX
AC AAC737
XX
DT 02-FEE
XX
XX
KW Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
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                                                                                                                                                                                                                                                                                                                                                                     밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic; IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection; inflammation; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAC73689 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human IL-5 antisense oligonucleotide ISIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-FEB-2001
                                                    Human IL-5 antisense oligonucleotide ISIS #16092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-MAR-1999;
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                                                                                                                                                                                                                           AAC73707 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 20; Page 63; 156pp; English.
                                                                                                               02-FEB-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                      688 GCCAATGAGGTAATTTTCTT 707
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20;
interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ISIS PHARM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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                                                                                                            (first entry)
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                                                                                                                                                                                                                           DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 20; pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.1e+02;
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
inflammation; cancer; ss.
                                                                                                                                                                                                                                                      Sequence 20 BP; 4 A; 8 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200058512-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                              AAC73709;
                                                            AAC73709 standard;
                                                                                                                                                                                                                                                                                    prevent or delay infection, inflammation or tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                     Example 20; Page 64; 156pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-594648/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-MAR-2000; 2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                     2241 AAGATTTTGGAGGAGAAGGA 2260
                                                                                                                                    20
                                                                                                                                                                                                           Similarity
                                                                                                                                      AAGATTTTGGAGGAGAAGGA 1
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                                                                                                                                                                                               Conservative
 (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-00280799
                                                            DNA;
entry)
                                                                                                                                                                                                           0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mckay
                                                                                                                                                                                               ٥,
                                                                                                                                                                                                           Score 20;
Pred. No.
                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                           1.1e+02;
                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                               Indels
                                                                                                                                                                                               ٥,
                                                                                                                                                                                               Gaps
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RESULT 105
AAC73709/c
Human; interleukin-5; IL-5; signal transduction;
                                                                                                                                                                                  Human IL-5 antisense oligonucleotide ISIS #16094.
                   26-MAR-1999;
                                       17-MAR-2000; 2000WO-US007318.
                                                                                WO200058512-A1
                                                                                                   Synthetic
                                                                                                            Homo sapiens.
                                                                                                                                 II-5 receptor-alpha; asthma; eosinophilic syndrome;
inflammation; cancer; ss.
                                                                                                                                                    antisense oligonucleotide; antiasthmatic;
                    99US-00280799
                                                                                                                                                    immunosuppressive; cytostatic;
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(ISIS-) ISIS PHARM INC

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RESULT 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
        The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5
                                                                                                                                                                                                                                                                                                                                                                                                                            Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno IL-5 receptor-alpha; asthma; eosinophilic syndro
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                                                                                                Example
                                                                                                                                          Antisense
                                                                                                                                                                       WPI; 2000-594648/56.
                                                                                                                                                                                                                                                        26-MAR-1999;
                                                                                                                                                                                                                                                                                  17-MAR-2000; 2000WO-US007318
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                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                               inflammation;
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                                                                                                                                                                                                                                                                                                                                                                                                                 cancer;
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Pred. No.
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3. 1.1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                            immunosuppressive; cytostatic;
syndrome; infection;
                                                                                                                         treat asthma and eosinophilic signal transduction.
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RESULT 107
AAC73695/c
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                                                                                                          The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immuno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           syndrome. The oligonucleotides are also useful for prevent or delay infection, inflammation or tumour
                                                                                                                                                                                                                                     Antisense oligonucleotide con syndrome in humans modulates
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                                                                                      Sequence
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                                                                                                                                                                                                                                                                                             Dean
                                                                                                                                                                                                                                                                                                                                         26-MAR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antisense oligonucleotide; antiasthmatic; IL-5 receptor-alpha; asthma; eosinophilic
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                                                                                                                                                                                                                                                                                                                   (ISIS-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               inflammation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP; 3
                                                                                      BP;
                                                                                                                                                                                                              Page 63; 156pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                           Conservative
                                                                                                                                                                                                                                                                                                                                                               2000WO-US007318
                                                                                                                                                                                                                                                                                                                    PHARM INC
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                                                                                      A; 4 C; 6 G; 5 T; 0 U; 0 Other;
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Pred. No.
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Pred. No.
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                                                       1.1e+02;
                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunosuppressive; cytostatic;
syndrome; infection;
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RESULT 108 AAC73688/c

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                                                                                                                                                                                                                                                                                                                                                                                The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (II-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding II-5 and II-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with II-5 signal transduction, II-5 expression or II-5 receptor-alpha expression. Such diseases include asthma and cosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immunosuppressive; call-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
         Homo sapiens.
Synthetic.
                                             Human; interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immunos IL-5 receptor-alpha; asthma; eosinophilic syndror inflammation; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
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                                                                                                          Human IL-5
                                                                                                                                   02-FEB-2001
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                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 20;
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20; Conserv
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                                                                                                                                                                                   standard;
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                                                                                                        antisense oligonucleotide ISIS #16089
                                                                                                                                                                                                                                                                                                                                                                        delay
                                                                                                                                                                                                                                                                                               Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 63; 156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9905-00280799
                                                                                                                                                                                                                                                                                                                                                                       infection, inflammation or tumour
                                                                                                                                                                                   DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                              6 C; 4 G; 6 T; 0 U; 0 Other;
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Pred. No.
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hes 0;
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                                                        immunosuppressive;
syndrome; infection
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                                                                                                                                                                                                                                                                                                                      Length 20;
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                                                                     cytostatic;
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                                                                                                                                                                                                           Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antisathmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             prevent or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2000-594648/56.
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                                                        06-APR-1999;
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                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                          Human IL5 polynucleotide fragment #1155.
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                                                                                                                                                                                                                                                                                                                                                                                                                                               standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTTTCACAGAAAAAGTGTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           delay infection, inflammation or tumour formation
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llarity 100.0%;
Conservative
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Pred. No.
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(UYEC-) UNIV EAST CAROLINA. (NYCE/) NYCE J W.

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RESULT 111
ABX04348/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.

CC The antisense oligonucleotides and (I) can be used to down-regulate the cc expression and or activity of target polypeptides associated with cc lung/respiratory disorders and malignancies, such as stimulating and activating peptide factors and malignancies, such as stimulating and continuously produced antibodies, antibody receptors, cytokines and cc chemokines, endogenously produced specific and non-specific enzymes, chinding proteins, adhasion molecules and their receptors, cytokine and cc chemokines receptors, adhasion molecules and their receptors, cytokine and creceptors, cytokine and creceptors, cytokine and cc receptors, chinding proteins and malignancy associated proteins. The creceptors, binding proteins and malignancy associated proteins. The creceptors, binding proteins and malignancy associated proteins. The creceptors binding proteins and malignancy associated with a disease or condition selected from pulmonary vasociated with a disease or condition selected from pulmonary vasociated with a disease or condition selected from pulmonary vasociated with a disease or condition selected from pulmonary vasociated with a disease (CopD), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary cancer. AAP18434 to AAP21543 represent human polynucleotide condocressent invention of the present human polynucleotide condocressent convention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
26-MAR-1999;
                                     07-MAR-2001; 2001US-00800629
                                                                            12-SEP-2002
                                                                                                                   US2002128216-A1
                                                                                                                                                                                             immunosuppressant;
                                                                                                                                                                                                                   Human;
                                                                                                                                                                                                                                                      Human Interleukin 5 antisense oligonucleotide ISIS 16079
                                                                                                                                                                                                                                                                                               13-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                           ABX04348 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3064 AACAAAAGGACAGAGAGACA 3083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                               ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
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20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention
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                                                                                                                                                                                                                                                                                             (first entry)
9908-00280799
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽
                                                                                                                                                                                                                                                                                                                                                                           DNA;
                                                                                                                                                                                               eosinophilic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.6%;
                                                                                                                                                                                                                                                                                                                                                                           20
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%; Pred. No. 1.1
0; Mismatches
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                                                                                                                                                                                               syndrome;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.1e+02;
hes 0;
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RESULT 112
ABX04353/c
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Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         include are a pharmaceutical composition comprising the antisense oligonuclectide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 receptor a for modulating the expression of mammalian IL-5 receptor a in mammalian cells or tissues, for altering the ratio of the isoforms of mammalian having a disease or condition associated with IL-5 signal transduction, in-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (DEAN/)
(KARR/)
(MCKA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                               Human Interleukin 5 antisense oligonucleotide ISIS 16084.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 5 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an antisense compound of 8-30 nucleobases length, which modulates interleukin (IL)-5 signal transduction. Al
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                                                          26-MAR-1999;
17-MAR-2000;
                                                                                                        07-MAR-2001; 2001US-00800629
                                                                                                                                                                       US2002128216-A1
                                                                                                                                                                                                                                                Human; se;
                                                                                                                                                                                                                                                                                                                13-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                            ABX04353 standard; DNA; 20
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                                                                                                                                        12-SEP-2002.
                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                  immunosuppressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MANO/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    964 TGATGGCATGAATAAGTAAA 983
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KARRAS J G.
MCKAY R.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20; Page 19; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGATGGCATGAATAAGTAAA 1
                                                                                                                                                                                                                                  antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
ressant; eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                            2000WO-US007318
                                                                                                                                                                                                                                                                                                              (first entry)
                                                                         99US-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mckay R,
                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
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'n

Gaps

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(DEAN/) DEAN N M. (KARR/) KARRAS J G. (MCKA/) MCKAY R.

(MANO/)

MANOHARAN

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RESULT 113
ABX04372/c
THE PRINCE OF STREET PRINCES O
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           length, which modulates interleukin (ii) signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of the expression of IL-5 receptor a.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABX04372 standard;
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WPI; 2003-039602/03
                                                 Dean NM,
                                                                                                                                                                                                                                                 26-MAR-1999;
17-MAR-2000;
                                                                                                                                                                                                                                                                                                                             07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                          12-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                               US2002128216-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        immunosuppressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 4; Page 19; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 transduction
                                                                                                                                                                (DEAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1884 ACCAACTGTGCACTGAAGAA 1903
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Interleukin 5 antisense oligonucleotide ISIS 16103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
                                                                                                                                   DEAN N M.
KARRAS J G.
MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                        MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                 Karras JG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP; 3 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                 99US-00280799
2000WO-US007318
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 C; 5 G; 8 T; 0 U; 0 Other;
                                                    Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.6%;
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Pred. No.
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                                                    Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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RESULT 114
ABX04344/c
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Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                             (DEAN/) DEAN N M.
(KARR/) KARRAS J G.
(MCKA/) MCKAY R.
(MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of II-5 receptor a. The antisense compound is useful for modulating II-5 signal transduction, modulating expression of mammalian II-5 or modulating the expression of mammalian II-5 receptor a in cells or tissues, for altering the ratio of the isoforms of mammalian II-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with II-5 signal transduction, II-5 expression or II-5 receptor a expression, where the disease or compound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABX04344 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20
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                                                                                                   Dean NM,
                                                                                                                                                                                                         17-MAR-2000;
                                                                                                                                                                                                                       26-MAR-1999;
                                                                                                                                                                                                                                                 07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                12-SEP-2002.
                                                                                                                                                                                                                                                                                                            US2002128216-A1
                                                                                                                                                                                                                                                                                                                                                                                      Human;
                                                                                                                                                                                                                                                                                                                                                                                                                Human Interleukin 5 antisense oligonucleotide ISIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABX04344;
                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                      immunosuppressant;
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                                                                       2003-039602/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 TTTTTCACAGAAAAAGTGTG 1
                                                                                                                                                                                                                                                                                                                                                                                      88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20; Page 19; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTTCACAGAAAAAGTGTG 2127
                                                                                                   Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                    antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP; 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                         2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                       99US-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; 4 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                      eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.6%;
                                                                                                   Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP
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70
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Pred. No.
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                                                                                                    Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.1e+02
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0

Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal

Example

20;

Page

19;

77pp;

English

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RESULT 115
ABX04342/C
ID ABX043
XX ABX043
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XX Human
XX Human
XX Homo I
XX I 12-SE
XX I I 12-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, in cells or tissues, for altering the ratio of the isoforms of mammalian in IL-5 receptor a in mammalian cells or tissues, treating a mammalian characteristic humanian transduction, IL-5 expression or IL-5 receptor a expression, where the disease or condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 20
                                                                                                                                                          Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAR-1999;
17-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-MAR-2001; 2001US-00800629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human Interleukin 5 antisense oligonucleotide ISIS 16073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                          WPI; 2003-039602/03
                                                                                                                                                                                                                                                                                                                                                                                                           (KARR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2002128216-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunosuppressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABX04342 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DEAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       an
                                                                                                                                                                                                                                                                                                                                Z
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antisense oligonucleotide targetting human IL5
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                                                                                                                                                                                                                                                                                                                                                                                                           DEAN N M.

KARRAS J G.

MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       l Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                  MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAATGCTGGTGTGCTGTAA 876
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                                                                                                                                                                                                                                                                                                                             Karras JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antisense; interleukin 5; IL-5; IL-5 receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP; 7 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000WO-US007318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9908-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    eosinophilic syndrome; asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7 C;
                                                                                                                                                                                                                                                                                                                             Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 G; 4 T;
                                                                                                                                                                                                                                                                                                                          ₩,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                             Manoharan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form versus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 receptor a, in cells or tissues, for altering the expression of mammalian IL-5 receptor a in mammalian cells or tissues, for altering the ratio of the isoforms of mammalian having a disease or condition associated with IL-5 signal transduction, having a disease or condition associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor a expression, where the disease or
                                                condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting human IL5
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BP; 4
  P
     6
     C; 4
     ဂ္
     6 T;
  0 U;
     0
     Other;
                                                                             sequence
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Query Match
Best Local S
                                 Matches
              540 ACGTTTCAGAGCCATGAGGA 559
20
                                 20;
                                        Similarity
ACGTTTCAGAGCCATGAGGA 1
                                 Conservative
                                        0.6%;
                                0,
                                        Score
Pred.
                                Mismatches
                                        . 20;
                                                DB 1;
                                        1.1e+02;
                                               Length 20;
                                 Indels
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ARSULT 116
ARXO4358/C
ID ABXO43
XX
AC ABXO43
AC ABXO43
XX
DT 13-JAN
XX
Human
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Human
XX
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P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABX04358;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
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Human; immunosuppressant; 88; antisense; interleukin 5; IL-5; IL-5 receptor; eosinophilic syndrome; asthma antiasthmatic;

Homo sapiens

US2002128216-A1

12-SEP-2002

07-MAR-2001; 2001US-00800629

26-MAR-1999; 17-MAR-2000; 2000WO-US007318 9908-00280799

(DEAN/)

(KARR/) DEAN N M.
KARRAS J G.
MCKAY R.

Dean NM (MANO/) MANOHARAN M Karras JG, Mckay æ,

Manoharan

2003-039602/03

syndrome Novel antisense compound expression or IL-5 signal or asthma associated for treating disease/condition e.g. eosinophilic lated with interleukin-5 or IL-5 receptor l transduction, modulates IL-5 signal

Example 20; Page 19;

77pp; English.

The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (II)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonucleotide and a pharmaceutically acceptable carrier or diluent, a diagnostic kit for detecting the expression level of the membrane (versus soluble form of II-5 receptor a. The antisense compound is use for modulating II-5 signal transduction, modulating expression of

embrane form

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relates to modulates : an

i.

Example 20; Page 19; 77pp; English.

The invention length, which interleukin antisense compound of 8-30 nucleobases in erleukin (IL)-5 signal transduction. Also